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ABSTRACT

This investigation is directed toward an analysis of the dynamics of the learning situations in a variety of public school elementary and secondary classrooms. The focus of the project is to make a comparative analysis of the patterns of cooperation or alienation among parents, teachers, peers and individual pupils which create learning cultures of differing productivity. Questionnaires and group interviews with teachers and pupils and classroom observation provide the data for evaluation. Investigation and analysis is made in the following areas: the determinants and effects of a pupil's perception of his parents' attitudes toward school; the relationships of peer liking patterns in the classroom to pupil attitudes and performance; the relationship of teacher attitudes to pupil attitudes and performance; the relative impact of parent, peer, and teacher factors on pupil performance; and the determinants and effects of teacher-pupil compatibility patterns. An appendix contains the sociometric questions used in the collection of data. This document was previously submitted as ED 001 230. (Several pages may be light.) (Author/SHM)

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PUPIL-TEACHER ADJUSTMENT AND MUTUAL ADAPTATION IN CREATING CLASSROOM LEARNING ENVIRONMENTS

COOPERATIVE RESEARCH PROJECT NO. 1167

Robert S. Fox
Ronald O. Lippitt
Richard A. Schmuck

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Pupil-Teacher Adjustment and Mutual Adaptation in Creating Classroom Learning Environments

by
Robert S. Fox
Ronald O. Lippitt
Richard A. Schmuck

With Collaboration of

David Epperson
Margaret Luszki
Elmer Van Egmond

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The University of Michigan

PREFACE

The school provides one of the two major "socialization cultures" for the child. Its impact is exerted on his life space through his participation, five days a week, nine months a year, in the interaction and activities of the school. Through school policies, selected curriculum materials and professionally trained teachers, the school assumes responsibility for a variety of socialization tasks: communication of knowledge about the physical, biological, social, economic, and political environments; teaching skills of acquiring and using knowledge in the solving of problems; forming values and attitudes about standards of achievement, morals, interpersonal orientations, and self worth.

The type of collaboration between pupil and teacher in the acceptance of these goals and ways of working toward them is crucial to the efficient transmission of the culture and to the development and growth of creative contributions to the culture.

This project is directed toward an analysis of the dynamics of the learning situations in a variety of public school classrooms. The focus of the project is to make a comparative analysis of the patterns of cooperation or alienation among parents, teachers, peers and individual pupils which create learning cultures of differing productivity in about 30 classrooms at elementary and secondary levels in seven different school systems.

For a period of more than ten years a team of social scientists and educators at The University of Michigan have been interested in gaining

a clearer understanding of the interpersonal dynamics of the classroom as a means of enhancing learner achievement as well as improving the state of mental health of pupils.

In 1953 efforts to diagnose problems faced by the low power or socially ineffective child in the classroom led to an appreciation of the central role played by the classroom peer group in any attempt to modify the "learning atmosphere" for any one child. Later studies pointed to parents as important supporters of pupil activity in the classroom. Further studies of classroom atmospheres led to the development of some diagnostic tools which proved useful to teachers in gaining the information they needed about peers and parents to make interventions designed to change the situation for the individual child or for the group. This project, a study of "Pupil Teacher Adjustment and Mutual Adaptation in Creating Classroom Learning Environments," examines the basic data from classrooms of a large variety of teachers who later studied data like these on their own classrooms and tried to do something to improve the learning and mental health conditions in the classroom. The major interest of this study is in looking at the social psychological factors linking peers, parents, teachers and individual pupils in creating productive classroom learning atmospheres.

The project was supported over the period 1959 to 1963 by a grant from the U.S. Office of Education (Cooperative Research Project No. 1167). Robert S. Fox and Ronald Lippitt were the principal investigators. Richard Schmuck and Elmer Van Egmond served as project coordinators. Margaret Luszki and David Epperson were major collaborators throughout the study.

Substantial contributions were made by Mark Chesler, a research assistant, Mabel Kaufman, a classroom teacher on the research team as interviewer and analyst; James Wigle, statistical assistant, Donald Griffin, field assistant; Jaques Rude and Oscar Alers, research assistants.

Special thanks are given Karen Donahue, the secretary typist of the project. Mrs. Donahue was assisted in typing the manuscript by Carol Tomke and Karen Bergemann.

The quality of interpersonal relationships among the team members and the helpful interaction among the project staff at all stages of the project's development are responsible in large measure for its successful conclusion.

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Chapter I

A LOOK AT THE CLASSROOM LEARNING ENVIRONMENT*

Already at 8:45 a.m. Mrs. Thrasher's 2nd grade classroom is a beehive of activity. Although school doesn't start officially until 9:00, many of the children have come early and are engaged with small groups of their friends in a variety of projects. Richard (#260), Robin (#259), and James (#240) are engrossed in a small terrarium containing a couple of toads and a garter snake. Richard is talking loudly to his friends, tapping on the glass next to the snake, and saying, "Sure snakes can eat toads! You just get this one mad enough and he'll go after it!" Brenda (#241) is looking on, too.

Three girls are gathered around a small record player listening to records. Sally (#245) seems to be operating the machine.

A couple of boys are playing dominoes. Five or six children are gathered around Mrs. Thrasher. Al (#261) is describing a canoe ride he'd had with his dad the afternoon before. Each of the others is obviously trying to get a chance to tell about something he had done, too.

Jerry (#243) is scuffling with George (#246), but a severe look from Mrs. Thrasher seems to have some effect.

At 9:00 all twenty-four of the children have arrived. Mrs. Thrasher seats herself as a signal for them to gather around her in a semi-circle, sitting on the floor. Planning for the morning's unit period on Pre-historic Animals is about to begin.

---

*Robert Fox primarily is responsible for the contents of Chapter I.

As outside observers, interested in the dynamics of the classroom, we may say to ourselves: This seems to be a fairly normal elementary classroom - eager children, a good deal of noise and activity, interest centers, pleasant surroundings, an understanding and capable teacher.

"Mrs. Thrasher, my mother took me to the museum yesterday afternoon and I saw their dinosaurs," breaks out Richard (#260). "They had a tyrannosaurus. It came from Wyoming. Mrs. Thrasher, can our class go see it?"

"Yes, yes. Can we, Mrs. Thrasher?"

The other children seem to regard Richard with some respect and awe. His contribution is typical of his knack for anticipating what would be of interest and worth for the group.

Why do the children accept Richard's suggestion so readily? Do they really respect his intellectual ability and his expertness in school subjects? Or does he just happen to hit upon a suggestion that coincides with group needs and interests of the moment?

"Well," says Mrs. Thrasher, "If we were to go, what could we find out? Which of our questions (referring to a neatly lettered series of questions listed on a sheet of newsprint posted on the bent board) might be answered at the museum? Martha?"

Martha (#257) hangs her head and looks embarrassed at having been called upon.

"Yes, Al (#261)?"

"We could see what dinosaurs really look like."

"We would find out where they come from," added Burton (#253).

"How many dinosaurs do they have?"

The teacher interrupts. "Do you suppose we could appoint a committee to help plan a trip to the museum?"

"Yes - I nominate Richard (#260)," says Sarah (#252).

"Burton (#253)," calls out another pupil.

"Me," yells Jerry (#243), wanting to get into the middle of things as usual.

"Oh, Jerry, be quiet," says Gretchen (#256).

"Yes, be quiet, Jerry."

> You'd think Jerry could command more favorable responses from the group. He's active, physically strong, seems to have the potential for pushing the others around. Shouldn't that make some difference with children of this age level? Whatever it is that Jerry has or doesn't have, the other obviously have made up their minds about him.

The class proceeds to nominate possible committee members. Their names are placed on the blackboard and a vote is taken.

> One wonders what was the basis for the children's nominations. No discussion of criteria took place. Did they nominate their best friends? What collection of "expertness" is represented in the final committee? Did the selection process result in any hurt feelings? Are the same children chosen over and over again by this process?

Later in the morning, following a variety of other activities, the teacher alerts the class that time for recess is approaching. She raises the question of how they might work out an orderly way for the class to move from the room to the playground. (During the previous week the rush through the door had become progressively worse.)

Richard (#280) says, "I think you should stand up, push in your chair, walk to the door, and get in line with your hands at your side."

The class accepts Richard's suggestion without reaction or further discussion. They begin to push their chairs in and move toward the door.

> Has the class really understood the problem and committed itself to the solution? Why do they accept Richard's proposal so readily? Was he parroting a procedure used in a previous class? How could the teacher promote further group participation in the planning process?

Carol (#249) keeps on coloring when the rest of the group is ready to be excused for recess. Mary (#262) calls to her, "Hurry up. You're making all of us wait."

Carol responds, "Oh, shut up."

As the class is standing in line the girl behind Mary (#262) kicks her. Mary looks belligerently at her classmate but says nothing.

Jerry (#243) whispers to another child, "You can have this candy if you will play with me at recess time."

"I don't like that kind of candy" (i.e., "Go peddle your papers"), replied Bill (#248).

"You pig!" lashed out Jerry. He then turns and pushes another boy who had not been involved.

The class moves out onto the playground. Some of the group start to choose sides for a game of field ball. Karen (#258) is not among the first children chosen. She walks over to the fence and sits down. The teacher suggests that she rejoin the group. Sam (#255) says, "Come on, Karen." Karen begins to cry and pout.

Then Martha (#257) says, "Cry baby," and the class joins in. Karen does not reenter the game.

> Neither the teacher's attempt at support nor Sam's direct encouragement seems to be accepted by Karen. Are incidents of these types just a normal part of group life for children of this age? Or do they reflect unmet social needs or special opportunities for learning new skills of effective group life?

Bruce (#254) comes up to the teacher complaining that a gang is trying to get him and will beat him up. The teacher assures him she will keep her eyes open to prevent such an occurrence. (There had been other reports of gangs on the playground. They seemed to move against solitary children or attack other small groups. In discussion, children expressed

fear of these gangs. Some of the participants said they knew gangs were not allowed on the playground but if they refused to join one when asked the gang would turn on them.)

> Why does this kind of gang life exist among second graders? What are the forces causing it and how can they be dealt with constructively? Is there any carry-over of such gang life into the academic classroom activities?

Background of the class. The second grade at this school is much like second grades elsewhere. The twenty-four children range in chronological ages from 7 0 years (Al, #241) to 8 years 10 months (Carol, #249). Their performances on a reading test show a range of 1 8 years - 1.5 grade level (Brenda, #241) to 3.3 (Sally, #245). The children come from homes of various socio-economic levels probably a greater variety than characteristic of classrooms in many communities. Fathers' occupations include the following categories:

Professional	3
Managerial	4
Clerical and sales	6
Craftsmen foremen	2
Operators	1
Unemployed students	1
Unskilled laborers	2
No information	5

Some of the most interesting dimensions of this class have to do with its characteristics as a social group. The incidents reported in the preceding pages clearly reflect differences in the ways in which these children relate to each other and to their teacher. Some are well liked, others are not. Some are looked upon by the others as having good ideas or useful skills so that they may be called upon as resource people when the need arises, others are not so regarded. A few of the children are extremely influential among their peers - they seem to be able with little difficulty to get the others to accept their ideas or support them

in activities they propose. One of the boys (Jerry, #243) and one of the girls (Martha, #257) seem to have no influence at all.

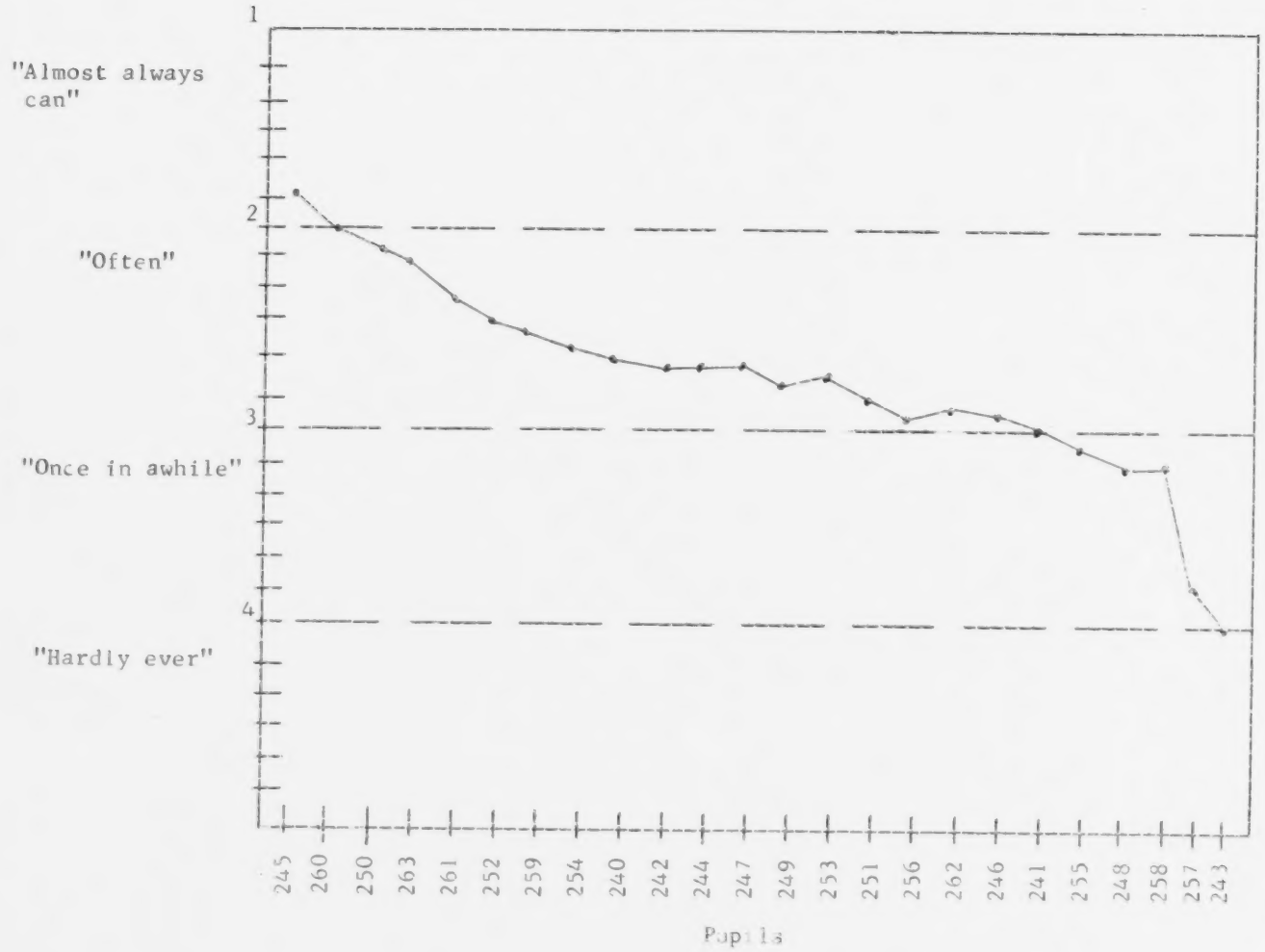
Social power. We can look at this pattern of influence or social power in greater detail. The children were asked, "What kids in this class have an easy time and what kids have a hard time getting you to do things they want you to do?" They were given opportunity to rate each pupil on a four-point scale - number "1" meaning "almost always"; number "2", "often"; number "3", "once in a while", and number "4", "hardly ever". The numbers were arranged alongside a small picture of each child, so that the rater had only to circle the appropriate number for each.

Sally (#245) was rated "1" by sixteen of the twenty-four children. In other words, two-thirds of the class reported that Sally could almost always get them to do things for her. Richard (#260) was attributed almost as high a degree of social power. Fifteen children rated him "1". Interestingly, there were two children in the case of Sally, and three for Richard who rated them at the other end of the scale, i.e., they considered that Richard and Sally could hardly ever get them to do things. Figure 1 shows the average ratings of social power attributed to class members by their peers.

Likeability. Opportunity was also given each class member to indicate on the four-point scale how well he liked other members of the group. An averaging of these scores produced a measure of attributed likeability. A device similar to that used to obtain social power was used. Pictures of each child in the class were accompanied by the four numbers, "1" meaning "you like this kid very much", "2" meaning "a little", "3" "you don't like very much", and "4" "you don't like at all". Interestingly, Sally (#245), highest in social power, also received the highest ratings on

FIGURE 1

ATTRIBUTED SOCIAL POWER
2nd Grade Class



Social Power - "Who has an easy time getting you to do things he wants you to do?"

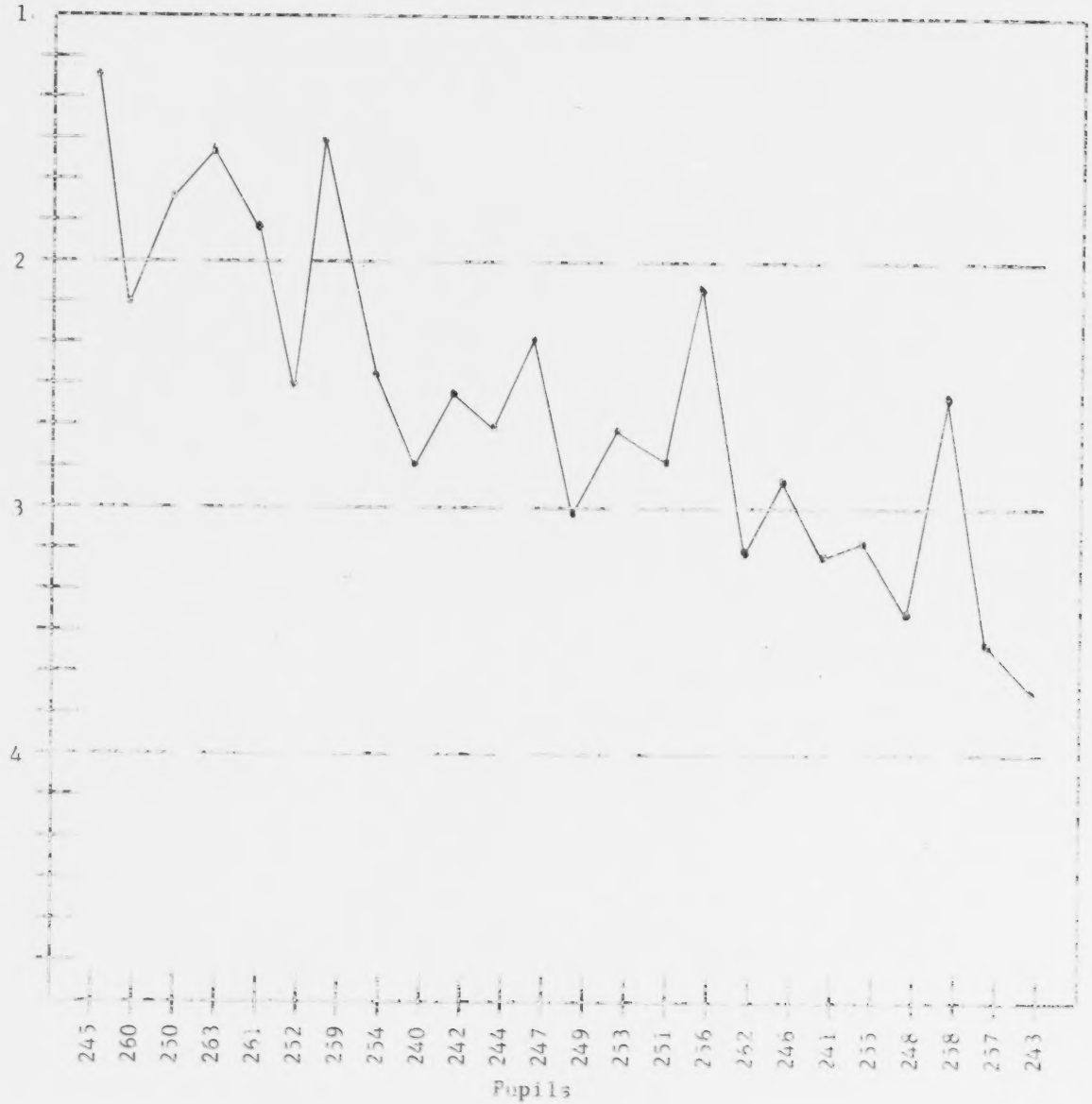
likeability. Twenty of the twenty-four children in the class liked Sally very much. The second highest pupil on likeability was not attributed quite such a high rank on social power. This was Robin (#259). Figure 2 shows the average of the ratings accorded each pupil on likeability. The range seems to be quite similar to that for social power, but the positions of children in rank order have shifted somewhat. Note that the pupils are arranged in the same order on Figure 2 as on Figure 1, namely by descending order of social power.

Expertness. A third dimension of the social climate of this classroom which might be examined is the attribution of expertness in performing the tasks normally associated with the school classroom. How do these children see one another as able to do arithmetic, as possessing information relative to problems under discussion, knowing the rules of the game or having the skill to be chairman of a work group? In response to the question, "Which kids are good at doing things you do at school," each child rated the others on the four-point scale--"1", "very good"; "2", "good", "3", "not so good"; and "4", "poor". Again, Sally (#245), leads the class (see Figure 3). She is seen by the largest number of her peers (19) as being very good at school work. Jerry (#243), on the other hand, maintained his position at the bottom of the class, being given sixteen ratings of "poor" at school work.

Sources of social power. It has been intimated in the foregoing discussion that social power may be dependent upon the kinds of resources that classmates attribute to the child. Included among these resources may be likeability and expertness. The relationships among these factors, and, in particular, the relationship they bear to social power in this second grade classroom may be more apparent if the data presented in the first three figures are gathered into one. Figure 4 plots the average scores for

FIGURE 2

ATTRIBUTED LIKING
2nd Grade Class



Liking
"Whom do you like in this class and whom do you not like?"

FIGURE 3

ATTRIBUTED LIKING
2nd Grade Class

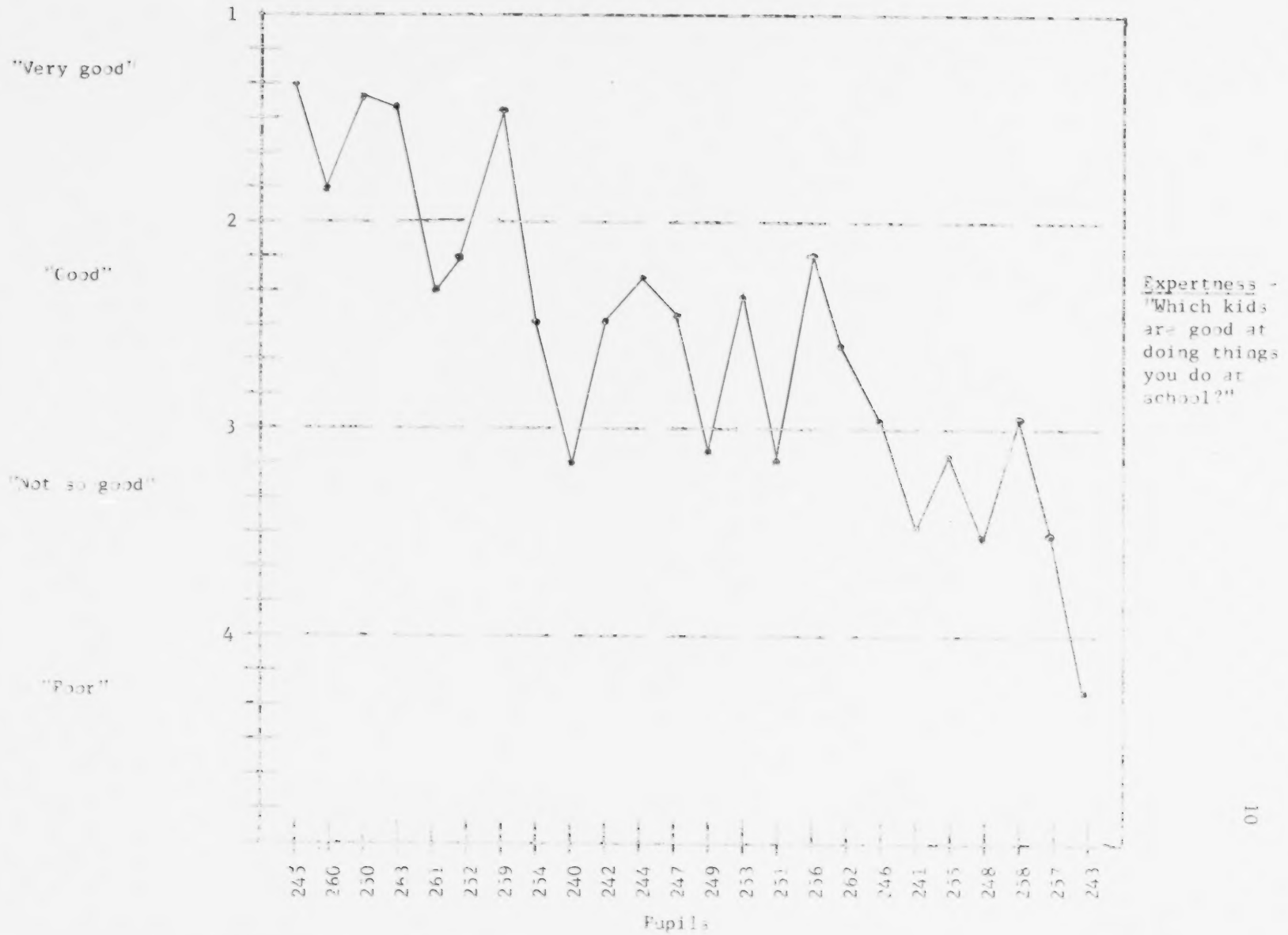
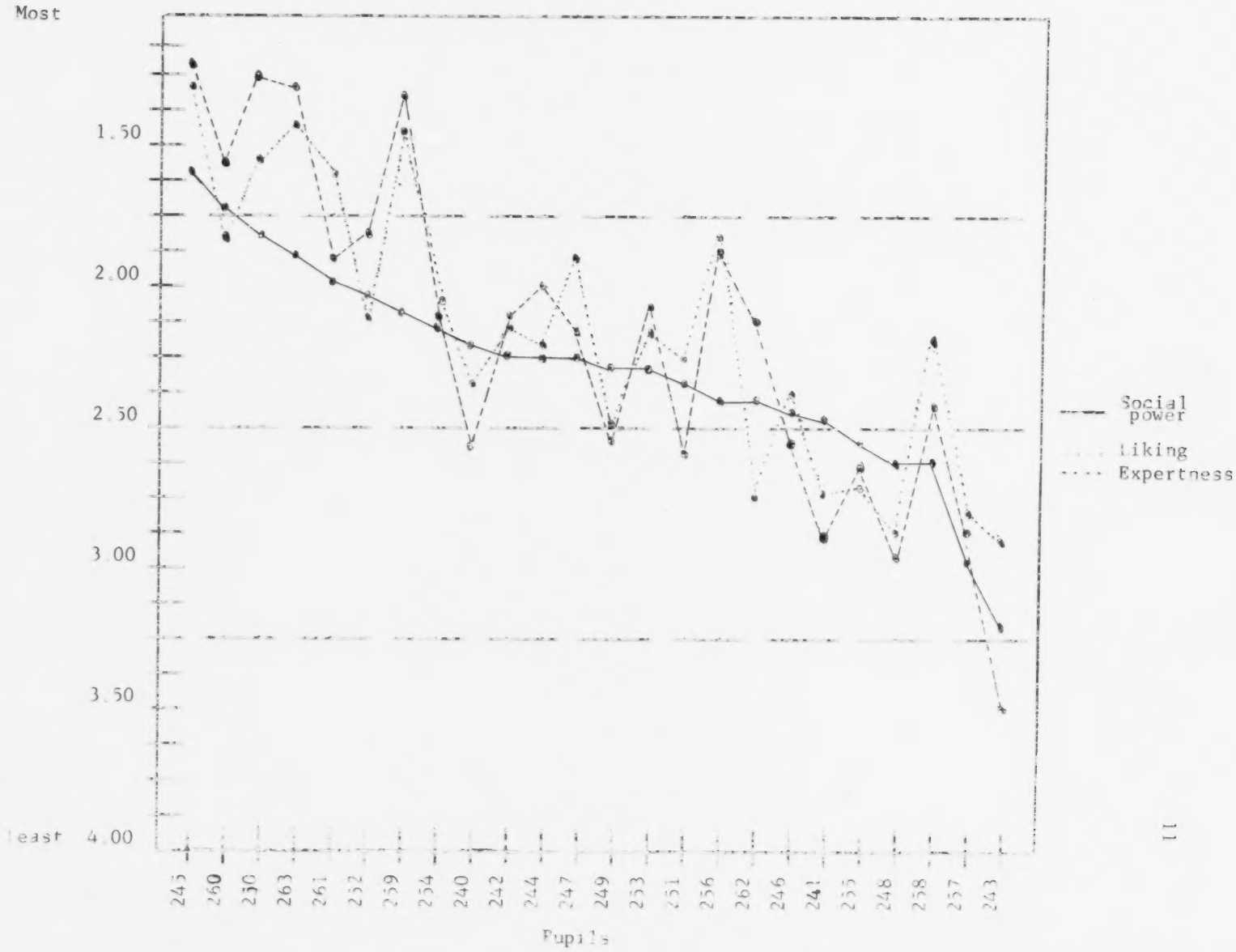

1
"Very good"
2
"Good"
3
"Not so good"
4
"Poor"
Expertness - "Which kids are good at doing things you do at school?"
245 260 250 243 261 252 259 254 240 242 244 247 249 253 251 256 262 246 241 255 248 258 257 243
Pupils

FIGURE 4

ATTRIBUTED SOCIAL POWER, LIKING, AND EXPERTNESS
2nd Grade Class



each child on likeability and expertness against the scores on social power which have been arranged in rank order. It becomes obvious that likeability and expertness are two important dimensions of social power for these children. But individual cases bear some study. Why is Robin (#259) rated nearly average in the class on social power, yet is second only to Sally (#245) in likeability and expertness? How does James (#240) manage to have relatively high social power when he rates among the lowest in expertness and well down on likeability? A brief look will be taken at some of these individual cases, subsequently.

A question might be raised regarding the degree to which this picture of the power structure of a group of school children is relevant to other age levels and to other situations. Data from a larger population of classrooms will be examined in subsequent sections of this report. However, at this time it may be instructive to look at the composite graph of a 5th grade classroom. Figure 5 shows the social power, liking, and expertness relationships in a group of eleven to twelve-year-olds. It will be noted that the same high degree of correlation between position on social power, liking, and expertness exists as with the 2nd graders, perhaps a bit more pronounced. High school classes show similar profiles.

Range of sociometric choices. Although it was not suggested to the pupils that they spread their ratings across the four levels, "1" through "4", they did so quite remarkably. They were, it appears, able to identify classmates who had social power and those who lacked such power, those who were expert and those who were less expert. Examination of Figure 6 reveals that while the positive level was used most heavily, (ratings of "1" - "almost always can get others to do thing", "like very much", "very good at doing the things we do at school"); the other levels, including the most negative,

FIGURE 5

ATTRIBUTED SOCIAL POWER, LIKING EXPERTNESS
5th Grade Class

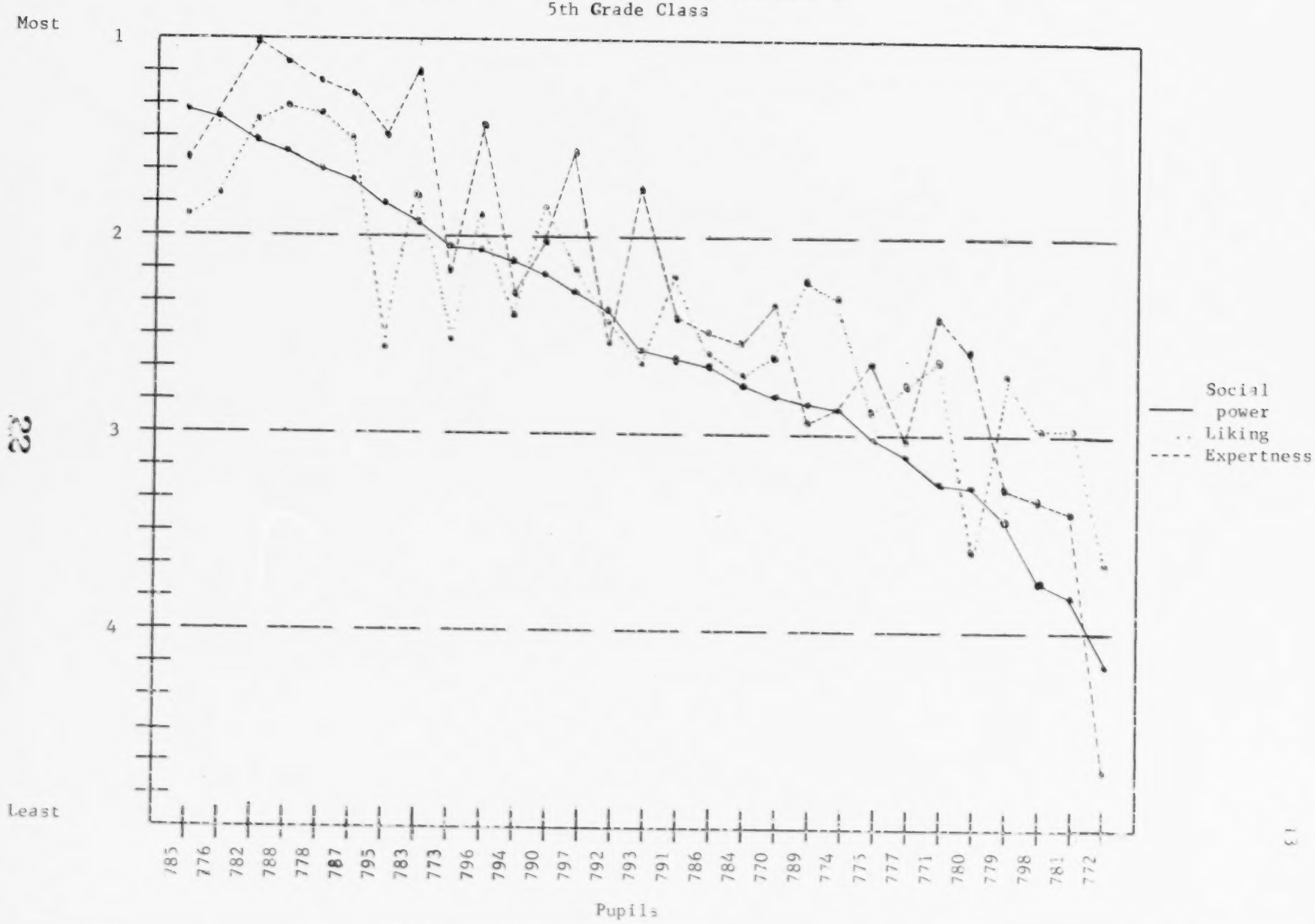
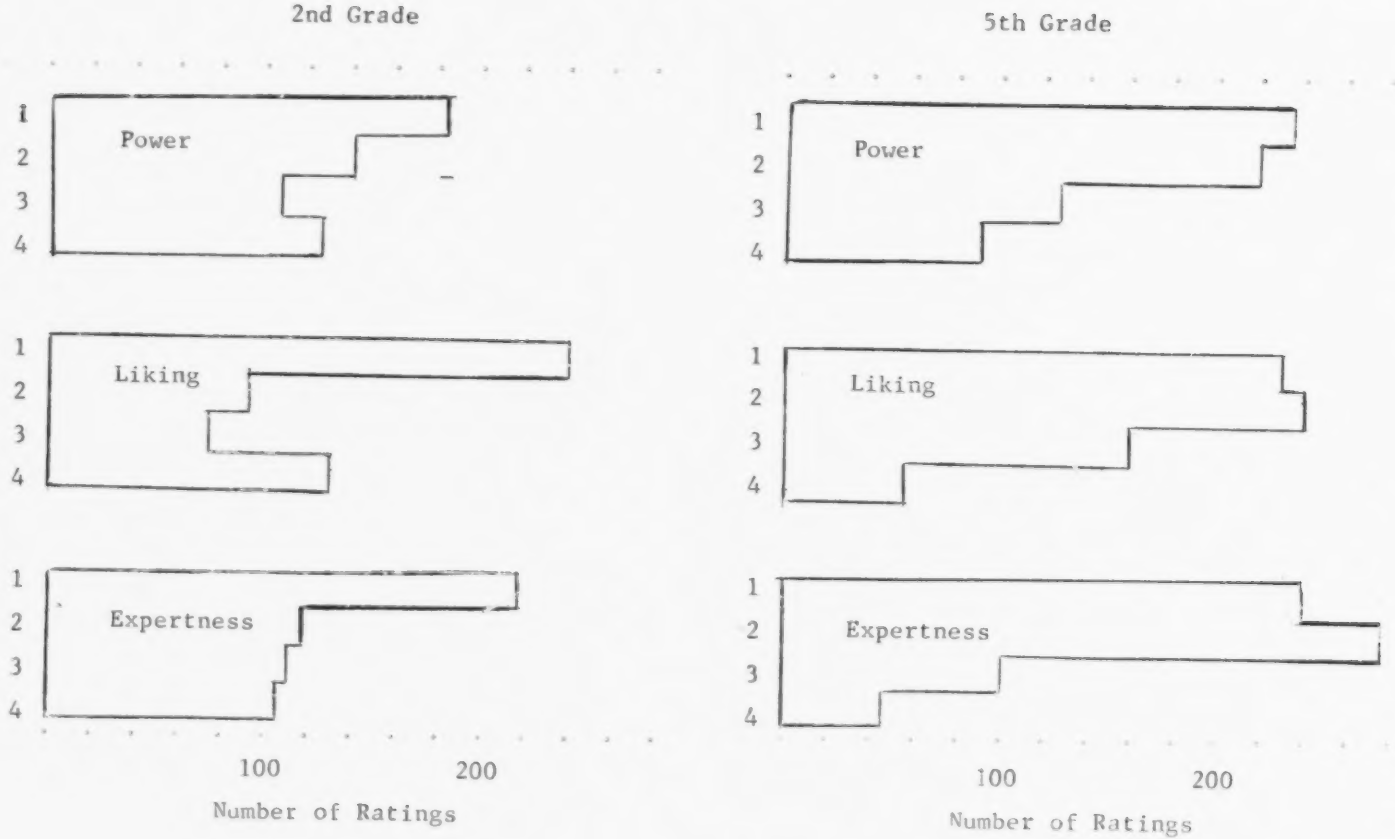


FIGURE 6

RANGE OF SOCIOMETRIC CHOICES



were used with considerable frequency. The 2nd grade classroom distributed its choices more evenly than the 5th. The 5th graders were more likely to attribute positive qualities to their classmates than were the 2nd graders.

Consensus. To what extent, it may be asked, does this range of ratings reflect a clear-cut consensus among the children regarding their classmates? The frequencies shown in Figure 6 may result from a somewhat random collection of "1's" and "4's", "2's" and "3's" for each child. Is a particular child apt to be rated high on social power by nearly all of the children in the class? Will nearly all agree that one child is expert at doing things at school, and another is poor?

If consensus were complete, a pupil rated high on social power would be given all "1" ratings (or 100%). Similarly, a child whom all agreed has no social power would get only "4" ratings. Therefore, one can use the per cent of "1" ratings given to those pupils who are in the upper quartile of the class on social power as a measure of consensus. Any percentage over 25 (which he would achieve if the ratings were completely random), would indicate a degree of agreement. Those approaching 100 per cent would indicate very high agreement. In Table 1 the percentage of "1's" and of "4's" given to the highest pupil and to the lowest pupil in the two classes on each of the measures is presented. There is greater consensus regarding the high ranking child, in each case, than for the low ranking one. The 5th grade shows a higher consensus for all characteristics except "liking". The second graders appear to be in greater agreement regarding whom they like and whom they do not like than do the fifth graders.

Table 2 presents similar data for both classes divided into quartiles. Thus, the upper one-fourth of the children on social power in the 2nd grade received 55% "1" ratings and only 18% "4's", in the 5th grade

TABLE 1

CONSENSUS AMONG CLASSMATES IN RATING HIGHEST AND LOWEST CHILD

Highest and lowest child	Of all ratings each child received the following percentages were:					
	Power		Liking		Expertness	
	1's	4's	1's	4's	1's	4's
2nd grade						
Highest child	70	9	87	4	83	0
Lowest child	9	52	30	61	9	70
5th grade						
Highest child	79	4	72	0	97	0
Lowest child	4	59	14	45	0	79

TABLE 2

CONSENSUS AMONG CLASSMATES IN RATING ONE ANOTHER ON POWER, LIKING, AND EXPERTNESS

Strata on each dimension	Of all ratings each child received the following percentages were:								
	Power			Liking			Expertness		
	1's	2's or 3's	4's	1's	2's or 3's	4's	1's	2's or 3's	4's
2nd grade									
1st quartile	55	33	12	71	22	7	72	23	5
2nd & 3rd quartile	29	50	21	39	40	21	37	48	15
4th quartile	18	46	36	30	24	46	14	48	38
5th grade									
1st quartile	72	22	6	64	36	0	81	19	0
2nd & 3rd quartile	28	64	8	30	65	5	29	69	2
4th quartile	9	61	30	17	62	21	2	78	20

this group received 72% "1" ratings and only 9 % "4's". The figures for the entire class support the generalizations drawn about the highest and the lowest pupils: (1) there is more agreement on the dimensions of social power and expertness among the older children than among the younger ones, and (2) there is more agreement at both age levels as to whom the high ranking children are than there is regarding the low ranking children.

Central or diffuse classroom structure. However, even though the individuals in these classrooms show considerable agreement, classrooms do differ considerably one from the other on how much consensus there is about liking, influence, and expertness. In other words, classrooms differ on how pupils distribute their interpersonal preferences. In some classrooms, for instance, interpersonal acceptance and rejection are narrowly focused. Such classrooms, referred to here as centrally structured groups, are characterized by a large number of pupils who agree in selecting only a small cluster of their classmates on a sociometric test. Along with this narrow focus on a small number of pupils, many other pupils are neglected entirely. On the other hand, some classrooms are characterized by a wide range of positive and negative choices--i.e., little or no focus of interpersonal acceptance and rejection upon a few members. These classrooms are referred to as diffusely structured groups. Such groups are distinguished by a more equal distribution of sociometric choices, by no distinct sub-groups whose members receive a large proportion of preferences; and by few entirely neglected pupils.

In general, data indicate that diffusely structured groups accompany more positive and supportive classroom atmospheres than centrally structured groups.

Stability. Perhaps the distribution of choices or group structure

is a function of the length of time the pupils have had to become familiar with the characteristics of other members of the class. One might predict that measures taken at the end of the school year would show a higher degree of consensus than those taken early in the year. Or of even greater significance, one might expect that because of the opportunities for growth and learning provided by the school there would be a general upgrading of the ratings given. Pupils at the end of the year would see each other as having improved in their skills of social influence, become more likeable, and be seen as more expert.

Actually, there is little variability over time on all measures, social power, likeability, and expertness. The rating scales were administered to both the 2nd graders and the 5th graders in the fall (October), and again in the spring (May). Correlations between the two times proved to be exceptionally high (significant at the .001 level in most cases). It may be noted that social power and expertness are more stable in the older group than in the younger age group. There seems to be no significant difference between age groups in the stability of likeability. Likeability, however, is more stable for the girls than for the boys.

The class as a group. To summarize, it has been shown that underlying the interaction that is so central a part of the teaching and learning process in a classroom is a network of interpersonal relationships. Children attribute to each of their classmates a level of social power or ability to influence others which varies from very high to very low. In the two classrooms described, it appears that being liked, or likeability, and being able to do things well at school, or expertness, constitute important sources of social power.

Children assess the status of their classmates on these variables very quickly at the beginning of the school year, and they maintain their

judgments with little variation throughout the year. The 5th graders had a higher level of consensus in their judgments at the beginning of the year than the 2nd graders and maintained their judgments with greater stability. There is more agreement with regard to the high status children than regarding those of middle or low status.

Against this general backdrop of the class as a group move individual children, each a composite of abilities and attributes, reacting and interacting with other pupils and with the teacher. What can be learned about pupils like Jerry (#243) and Karen (#258) and Martha (#257) who so obviously are operating at a low level of effectiveness in the classroom, that will help them improve? Can their state of mental health as well as their academic achievement be improved?

The low power pupils. The six children in the 4th quartile of the 2nd grade class to whom is attributed the least ability to influence others may be termed the "low power" pupils. Three of these are boys (Bill, #248, Jerry, #243, and Sam, #255) and three are girls (Brenda, #241, Martha, #257, and Karen #258).

Jerry (#243) is by far the lowest in the amount of social influence attributed to him by his peers. He is also the least liked in the class. With regard to expertness, his classmates place him in a category by himself, so extremely low as to indicate no expertness at all. Yet his scores on the reading test indicate a reading grade of 1.86, with five of his classmates scoring lower than he. Actual observation of Jerry's behavior in the classroom and reports by the teacher show him to be impulsive, often using physical force in his attempts to influence others.

Jerry seldom initiates any friendly behavior (although you will recall he was the one described earlier who tried to buy a playmate at recess time with offer of some candy). His influence attempts are seldom

successful. The other children find themselves interacting with him negatively. Their manner is usually one of ordering or telling him to do something. He receives no friendly approaches from others.

Jerry rates himself realistically with regard to his influence in the group, placing himself in the lowest category. He was quite unrealistic, however, about how expert others saw him to be and how well they liked him. He gave himself the highest ratings ("1's") on each of these factors, when, in fact, he ranked at the bottom of the class on both.

In general, Jerry is a low power, aggressive, unfriendly boy. He exemplifies dramatically the interrelationship among a number of social variables, each seemingly having some effect on the others. Whether or not his low academic resources affect his low status with his peers, or vice versa, is a question which can and will be explored in the research described in subsequent chapters of this report. Of particular interest to Jerry's teacher is the possibility of helping him improve his social position. The school traditionally gives considerable attention to the academic problems of pupils like Jerry. The teacher in this classroom wants to plan toward some change in Jerry's social status, under the assumption that it may be valuable not only as a means of raising Jerry's level of mental health, but as a positive influence on his academic achievement.

In contrast to Jerry, the class agrees that Richard (#260) is high power. He is well-liked, but only to the extent of being at the top of the second quartile of the class. He is above average in intellectual performance, motor skills and procedural skills. Pupils rank him high in expertness, although his reading achievement is at about the class mid-point (2.2 grade level). The teacher characterizes him as a boy who thinks of others and understands their needs. He engages in much influence activity, mostly directing or ordering others. He frequently rejects the attempts of

others to influence him. He is physically aggressive, but often expresses friendly feelings toward others. In turn, he is the target of a good deal of physical aggression from others, but often receives the expression of friendly feeling from classmates.

Richard has confidence in himself. On the sociometric rating scales he assigned himself the highest ratings ("1 s") on all measures -- power, expertness, and liking. These ratings proved to be quite realistic. Richard, then, can be characterized as a high power, friendly, expert, active, assertive boy.

Another type of low power child is Karen (#258). She is seen by her teacher as above average in intellectual skill and motor skill. Her reading achievement is next to the highest in the class (2.9 grade level). Karen rates herself as being high in expertness. Yet her classmates rate her in the lower one-third of the class on expertness. She sees herself as being much better liked by her peers than she is; she places herself in the top category on social power, when actually she is near the bottom of the class. Her overpowering need for recognition and her tendency to withdraw rather than to face her problems were exemplified by the incident reported at the beginning of this chapter, where she left the game when not chosen first. She tries to influence others by making somewhat timid requests of them; and she receives mostly orders. Karen is a low power, passive child who apparently has considerable potential, but faces a serious problem in relating to her classmates.

Sally (#245) is the star high power of the class. Best liked, most expert, and highest in social power, she is a happy child who is successful in her social relationships. Her reading achievement is at the 3.3 grade level and her teacher says she is good in procedural skills and high in

overall intellectual performance. She doesn't try to influence others much; when she does she timidly requests rather than demands. She expresses more friendly feelings toward other children than do most, she never uses physical force. She receives a lot of influence attempts from others, mostly suggestions and requests. She is the target for expression of positive affect by a number of the class members.

In spite of this very positive picture from teacher and classmates, Sally rates herself low. She rated herself "2" on liking, meaning she thought the others in the class liked her "a little", and a "2" on expertness. Is this an expression of a kind of "modesty" which is expected of girls this age by their peers? Susan rated herself "3" on social power, as one who could "once in a while" get others in the class to do things. In spite of her very strong social position in the class, are there some ways in which Sally can be helped to be even more effective? In what ways could Sally be influential in improving the general social climate of the classroom?

Typology. To assist in the subsequent discussion of these and other pupils in the classrooms studied by this project, a set of generalized "types" have been identified, based upon those aspects of the pupil's interpersonal situation that seem most pertinent to the efforts of the teacher and her co-workers in the project to help the child improve. These types have been developed around such mental health variables as (1) the amount of social influence activity, (2) the degree of assertiveness or directiveness utilized in influencing others, (3) the degree of forcefulness or threat of force used, and (4) the kind of affect characterizing the pupil's influence efforts.

The activity variable ranges from "active" to "passive", and

is determined primarily by the number of attempts the child makes to influence others. Jerry (#243), for example, is fairly active in trying to influence others. Brenda (#241), on the other hand, seldom takes any initiative to influence others in the class.

The second variable, assertiveness, deals with the manner of influencing others. Some children demand or order others to do things, some ask or request rather forthrightly, and some ask or suggest timidly or tentatively. The directive or demanding approach generally allows for no comfortable refusal on the part of the pupil being influenced. The suggestion or request implies both that the initiator has a right to make the request and the pupil being influenced has a right to refuse should he wish to do so. Influence acts which are presented in the timid or tentative manner imply autonomy primarily for the pupil who is the target for the influence; it implies that the initiator feels he is on shaky ground in making his request insofar as his power for getting compliance is concerned.

Assertiveness has another dimension. The extent to which a pupil accepts or rejects the influence attempts of others is considered to be an indication of his level of assertiveness; the rejecting pupil being high in assertiveness, the accepting pupil, low.

Forcefulness is primarily a measure of the extent to which each child uses physical force in his influence attempts. This includes not only actually hitting others and pushing them around, but threatening them with menacing gestures. The initiator may threaten to use force at some future date or in the event the person he is trying to influence fails to satisfy certain requirements in the future. He may invoke sanctions by external agents - some peer, an adult, the group. The force does not always have to be exerted toward the person of the child being influenced. It may be inflicted

on some material object, such as tearing up a pupil's paper, or stamping on the floor.

The fourth variable has to do with affect. It ranges from "friendly" to "hostile". Pupils ranking high on this variable frequently initiate friendly behavior toward others; those ranking low frequently make unfriendly or hostile comments about or toward other pupils. Friendly acts are solicitous, supportive and sympathetic. Both giving and seeking affection are included. The unfriendly pupil expresses dislike or hate for the pupil who is the target. He may tear him down through name-calling or mocking.

All the behavior variables described above are "output" variables, i.e. they have to do with the type of behavior the child engages in as initiator or reactor. Another dimension to all of the foregoing types is the "input" dimension.

"Input" types also have to do with the variables of activity, assertiveness, forcefulness and affect. However, these types are concerned with the child who is receiving the influence. The child who is high on the input variable of activity receives or is the target for a large number of influence acts on the part of others. The child who is low on the input variable of assertiveness is mainly a target for the timid or tentative requests of others, rather than being ordered or being the target for demands. The child who is high on forcefulness input is the target of influence attempts of others that are physically aggressive - they are "shoved around", threatened, or hit. High friendliness input indicates a pupil who receives much positive affect; a low rating would be given a pupil who receives considerable expression of unfriendliness or hostility from his peers.

Table 3 summarizes the output and input types for the pupils in the second grade class that have been described. It will be noted that Brenda (#241) is a withdrawn, low power type that initiates few influence attempts, and does this mainly by pleading, usually accepts the influence of others, receives little influence from others, and when she does it may be aggressive and unfriendly. In contrast, Sam (#255), an active low power type, engages in much influence activity, mostly by telling others what to do, often rejects the attempts of others to influence him. His acts are sometimes physically aggressive and unfriendly, and he receives a lot of influence from others, some of which is, in turn, physically aggressive and unfriendly. Thus, two types, each with a different pattern of behavior, produce a common result - low social power.

All four of the high power children, in contrast to most of the low peers, often express friendly feelings toward others. All but Richard (#260) do not use physical force. Examination of a similar chart for the 5th grade class, Table 4, reveals that all four of the older high power children, including the boys, do not use physical force and often express friendly feelings toward others. The high powers usually have a lot of influence attempts directed toward them, but these are deferential - requests, suggestions, questions. Low powers also receive a lot of influence attempts; these are usually directives or orders. Low powers are most often the targets of physical aggression and unfriendly expressions of affect. Most high powers do not have physical force used against them and do enjoy the expression of friendly affect from others.

Utilization. Most of the variables described so far have involved personal or interpersonal components and relate to mental health. School

TABLE 3

INITIAL TYPES OF LOW POWER AND HIGH POWER CHILDREN
2nd Grade

Social Power		Output type		Input type	
		Activity-Assertiveness	Forcefulness-Affect	Activity-Assertiveness	Forcefulness-Affect
Brenda #241	Low	Initiates few influence attempts; is timid in her attempts to influence, usually accepts influence attempts of others.	Influence acts are sometimes physically aggressive; unfriendly feelings expressed sometimes.	Receives little influence from others; mostly orders.	Is target for some physical aggression and unfriendliness
Karen #257	Low	Much influence activity; mostly orders; often rejects attempts of others to influence her.	Is seldom physically aggressive toward others; sometimes expresses friendly feelings.	Receives a lot of influence from others; mostly orders.	Neutral - receives neither friendly nor hostile approaches.
Jerry #243	Low	Initiates some influence attempts; sometimes orders, sometimes suggests.	Is physically aggressive, frequently expresses unfriendly feelings.	Receives a lot of influence from others; mostly orders.	Is target for some physical aggression and unfriendliness.
Sam #255	Low	Much influence activity; mostly orders; often rejects attempts of others to influence him.	Influence acts are sometimes physically aggressive unfriendly feelings expressed sometimes.	Receives a lot of influence from others mostly orders	Is target for some physical aggression and unfriendliness

TABLE 3 Continued

	Social Power	Output type		Input type	
		Activity-Assertiveness	Forcefulness-Affect	Activity-Assertiveness	Forcefulness-Affect
Lois #250	High	Initiates some influence attempts; sometimes orders, sometimes suggests.	Does not use physical force; often expresses friendly feelings.	Receives a lot of influence from others; mostly suggestions and timid requests.	Is not target for physical aggression. Does receive much expression of friendliness.
Al #261	High	Initiates some influence attempts; sometimes orders, sometimes requests.	Does not use physical force; often expresses friendly feelings.	Receives some influence from others; some orders, some suggestions.	Is often target for some physical aggression; but also much expression of friendliness.
Sally #245	High	Doesn't initiate much; usually suggests or requests timidly; often accepts influence attempts of others.	Doesn't use physical force, often expresses friendly feelings.	Receives a lot of influence from others; mostly suggestions and timid requests.	Seldom is target for physical aggression; gets some expression of friendliness.
Richard #260	High	Much influence activity, mostly orders; often rejects attempts of others to influence him.	Is physically aggressive; often expresses friendly feelings.	Receives a lot of influence from others, mostly suggestions and timid requests.	Is often target for physical aggression; receives much expression of friendly feelings.

TABLE 4

INITIAL TYPES OF LOW POWER AND HIGH POWER CHILDREN
5th Grade

	Social Power	Output type		Input type	
		Activity-Assertiveness	Forcefulness-Affect	Activity-Assertiveness	Forcefulness-Affect
Kevin #798	Low	Initiates some influence attempts; sometimes orders, sometimes suggests.	Is seldom physically aggressive toward others; sometimes expresses friendly feelings.	Receives a lot of influence from others; mostly orders.	Is target for some physical aggression and unfriendliness.
Danny #779	Low	Initiates few influence attempts; is timid in his attempts to influence; usually accepts influence attempts of others.	Does not use physical force; often expresses friendly feelings.	Receives a lot of influence from others; mostly orders.	Seldom is target for physical aggression; gets some expression of friendliness.
Jill #771	Low	Initiates some influence attempts; sometimes orders, sometimes suggests.	Influence acts are sometimes physically aggressive; unfriendly feelings are sometimes expressed.	Receives some influence from others, some orders, some suggestions.	Is target for some physical aggression, and unfriendliness
Anne #780	Low	Much influence activity; mostly orders; often rejects attempts of others to influence her.	Is physically aggressive; often expresses unfriendly feelings.	Receives a lot of influence from others; mostly orders.	Is target for some physical aggression and unfriendliness

TABLE 4 Continued

	Social Power	Output type		Input type	
		Activity-Assertiveness	Forcefulness-Affect	Activity-Assertiveness	Forcefulness-Affect
Tim #776	High	Much influence activity, mostly orders; often rejects attempts of others to influence him.	Does not use physical force; often expresses friendly feelings.	Receives a lot of influence from others; mostly suggestions and timid requests.	Seldom is target for physical aggression; gets some expression of friendliness.
Jean #783	High	Initiates few influence attempts; is timid in her attempts to influence. Usually accepts influence attempts of others.	Is seldom physically aggressive toward others; sometimes expresses friendly feelings.	Receives some influence from others, some orders some suggestions.	Is seldom target for physical aggression; gets some expression of friendliness.
Steve #785	High	Initiates some influence attempts; sometimes orders sometimes suggests.	Is seldom physically aggressive toward others; sometimes expresses friendly feelings.	Receives a lot of influence from others, mostly suggestions and timid requests.	Is not a target for physical aggression. Receives much expression of friendliness.
Joan #788	High	Doesn't initiate much; usually suggests or requests timidly, often accepts influence attempts of others.	Doesn't use physical force, often expresses friendly feelings.	Receives a lot of influence from others, mostly suggestions and timid requests.	Is not a target for physical aggression. Receives much expression of friendliness.

is also concerned with academic achievement. Miss Thrasher and the other teachers estimated the level of utilization of academic aptitude by various class members by first dividing the class on the basis of intelligence test scores into two equal groups - the high ability (above the mean I.Q.) and the low ability (below the mean I.Q.). Then, each of these groups was divided into two equal divisions - those who, in the teacher's judgment were utilizing their ability at an efficient high level and those who were low utilizers. Thus, a utilization typology was developed:

High ability - High achievers

High ability - Low achievers

Low ability - High achievers

Low ability - Low achievers

The relationships between these mental health and achievement variables will be examined in subsequent chapters.

Teacher-pupil interaction. So far, the interpersonal situation in these classrooms has been discussed primarily from the standpoint of the individual children and their peers. It is true that the classroom is a kind of sub-culture in which the population is drastically skewed (in this case around the 7 1/2-year-old mode for the 2nd grade, and the 10 1/2-year-old for the 5th grade). However, an important part of the culture is the teacher. How does the teacher view the children, and they, her? What is the pattern of interaction between teacher and pupils? Does the teacher treat all children with dispassionate equality, or is there a tendency to interact more with the "active" children, or with the "trouble-makers," or with the most "expert" of the class? How do the children act toward the teacher? Which kinds of children seek out opportunity to interact with the teacher; which kinds avoid teacher contact?

Information about these matters may make a considerable difference to the teacher who is thoughtful about how children of various types can be most effectively helped.

Observation in these classrooms revealed some interesting patterns. It was recorded that the teacher in both rooms initiated contacts with the boys in the class more frequently than with girls. In the 2nd grade class contacts with the low power boys were most frequent of all. In turn, these younger, low power boys most frequently initiated contacts with the teacher. Thus, 2nd grade low power boys are both the initiators and the objects of a relatively high proportion of the teacher-pupil interaction. Conversely, the high power girls in the 5th grade class have least frequent interaction with the teacher.

The younger girls, both low and high power, were more friendly or affectionate in their approaches to the teacher than were other groups. There does not seem to be much difference in the affective quality of the teacher's approaches to the various categories of children, in either classroom.

With regard to the content of the interaction, the 2nd grade teacher deals much more with problems of social behavior than does the teacher of the 5th grade. While the comments made by both teachers were more often supportive than critical, it appears that the young children - low power boys in particular - were the targets for more critical comments from the teacher than any other age, sex, or power group. Question may be raised as to whether these findings are peculiar to these two classrooms or will bear up under more intensive study of many classrooms. It is clear, however, that for these groups the patterns of interaction described are reality, and must be taken into account as plans for change

in the situation are developed. It is possible that the low power boy in contrast to other children in the classroom, particularly the low power girl, has a double handicap in making the classroom situation more satisfying for himself: he has to change his behavior in relation to his peers, and he has to do likewise in relation to the teachers. The low power girl has to change only with regard to peer relations to make the classroom situation more satisfactory for herself.

Helping children improve. The primary objective held by the teachers in these classrooms in looking intensively at the problems of interaction in their classrooms is, of course, to improve the effectiveness of the children in their relationships with others and thereby increase the pupils' utilization of their academic ability, resulting in higher achievement. Can Jerry be helped to develop skills of relating to his classmates so that they will like him better, will listen when he has an idea to contribute, will give him supportive rather than negative feedback? How can the intellectual capabilities that Karen has to offer be channeled in such a way as to be seen by her classmates as resources for the group? How can she be helped to see how her insistence on being chosen first and her withdrawal from the group are ineffective means for gaining ends that may be legitimate and important?

The teachers in these classrooms also asked themselves about the ways in which the general atmosphere of the classroom could become more supportive to wholesome group interaction and to learning. Can children be taught to seek out the resources of their classmates, to be sensitive to the needs of others who may be less well endowed than they are, to understand more clearly the effects of their own behavior on others?

It is to explore such questions as these that the study reported in this volume was undertaken.

Chapter II

THE CLASSROOM LEARNING ENVIRONMENT CONCEPTUALIZED*

In the preceding chapter, a series of observations about the classroom learning environment was offered. Illustrations of teacher-pupil relations and pupil-pupil relations as crucial aspects of the learning process were presented. The need for more collaborative interest on the part of behavioral scientists and educators in uncovering and clarifying the basic psychological and social processes which underly personal development and classroom productivity is evident from Chapter I. The behavioral scientists who have responded to this challenge with the studies reported here have had social psychology as their focal discipline. They have been guided in their inquiries by some of the concepts and theoretical models of this discipline. The concepts have been continuously tested, clarified, and re-formulated by checking them against the actual processes of classroom life.

The theoretical ideas summarized here have of course also been partially forged in the process of previous investigations by a variety of researchers. Such concepts, and their organization into "little theories" represent one of the most practical and powerful tools in the kit of the research social scientist. These theoretical tools are presented at this stage of the report to see if we can (1) clarify and deepen our understanding of the behavior described in Chapter I and (2) provide an intellectual backdrop for interpretation of the various research results presented in Chapters IV, V, VI, and VII.

*Ronald Lippitt primarily is responsible for the contents of Chapter II.

The Development of Personal and Interpersonal Resources

Pupils we study in the classroom are manifesting and utilizing personal resources and interpersonal orientations toward peers, teachers and the educational situation which have been developed during previous years of schooling and the very important pre-school period. During the pre-school period of life, primarily with parents and siblings, the child has accumulated a relatively long history of success and failure experiences. His mother, father and older siblings have evaluated his performance and behavior. The criteria they used for evaluation were learned by the child and have now become a part of the definition of success and failure in his own daily activities.

Many of these criteria of evaluation have focused on competence of performance. The child has heard many times that he was "good" or "not good enough" at doing something, that he had lived up to expectations or had not lived up to expectations in feeding himself, dressing himself, verbalizing adequately, and using his intellectual and physical abilities to solve a multitude of daily problems. He has learned these criteria of evaluation from his parents and older siblings and has learned to apply them to himself, giving himself success and failure experiences, as well as receiving them from others.

A second cluster of evaluative criteria have focused around his relationship to others, or what we call his affiliation patterns. He has learned that "getting along with others" is highly valued and that it's important for him to "behave himself." He has learned that there are certain ways of initiating contact and connection with other persons which seem to result in painful disapproval or rejection and other patterns which result in pleasurable approval and inclusion. Also, he has learned that

there are certain ways of "getting others to do things" which seem to be acceptable and successful and other types of influence attempts which lead to resistance and failure.

In order to have a successful pre-school socialization experience the child must be helped to discover and to develop his resources: (1) as a learner-achiever and (2) as a human affiliate.

As a learner-achiever he must learn how to set realistic performance goals, to develop and utilize performance skills, and to enjoy the process of task accomplishment with its effort commitment and energy expenditure.

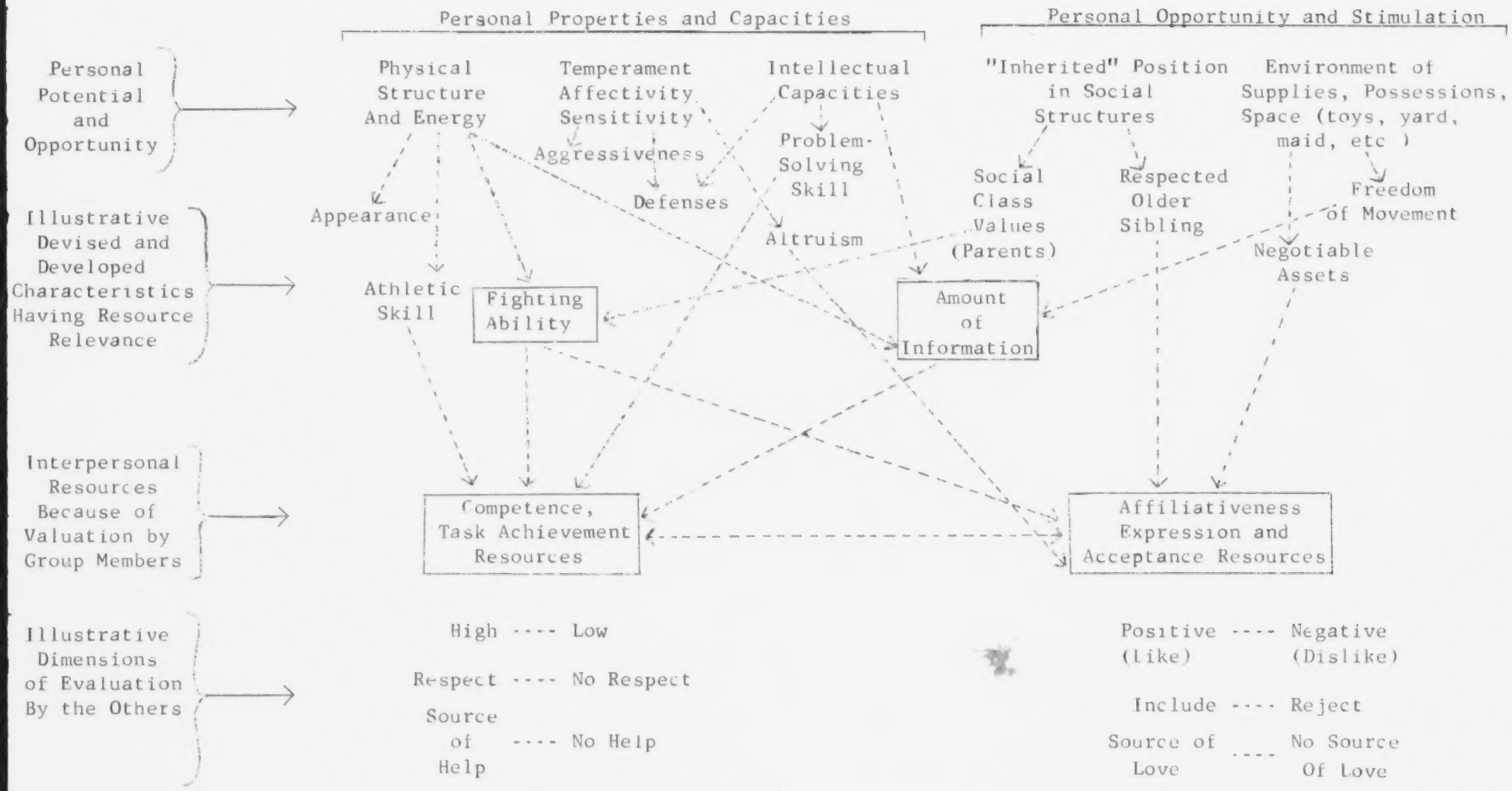
As a human affiliate he needs to learn how to give and receive emotional acceptance, to express hostility and frustration constructively and to exert and accept influence attempts in appropriate patterns.

Both involve a process of developing or integrating personal properties into skills, attitudes, values and behavior patterns which are appropriate to the valued criteria of achievement and affiliativeness which result in success experiences. This process of personal resource development has been roughly schematized in Figure 7.* The top row of the diagram represents the child's basic characteristics and environmental opportunities which provide the raw materials for his own pattern of development. The diagram has been divided into three internal clusters of characteristics of the child: his physical characteristics, his temperamental characteristics, and his intellectual capacities. In addition the section on his "opportunity situation" includes his location in a particular system of social relationships and his location in regard to

*The initial work on this conceptualization of interpersonal resource theory, and also the later section on circular process theory was done in collaboration with Dr. Sidney Rosen and Dr. George Levinger. A fuller development will be appearing in a monograph now in preparation with Drs. Rosen and Levinger.

FIGURE 7

BASIS AND DEVELOPMENT OF INTERPERSONAL RESOURCES OF THE CHILD



spatial, material and human supplies, i.e., the things and people in his environment.

The second row of the diagram illustrates the types of personal characteristics and skills which develop from the interaction of child with his environment. The illustrations indicate that several characteristics of the child and of his opportunity situation may contribute to the development of a particular personal outcome. For example, his unique development of fighting ability will be the result of his physical characteristics, his level of aggressiveness, and the type of subculture in which he lives. The amount of information he possesses will be a result of his energy level, his intellectual capacity, and the stimulus-richness of his physical and social environments. All of the other derived characteristics would be the result of a similar combination of personal and situational factors.

The third row, "resources valued by significant others" indicates, as we have mentioned above, that the child's developed characteristics are evaluated in terms of their relevance to his behavioral competence and his pattern of interpersonal affiliativeness with others. Again the diagram indicates by illustration that the child's developed skills may have a multiple resource value. For example, fighting ability is one criterion of competence, but it will also have an effect on the child's interpersonal acceptance or rejection by peers or grownups.

The bottom row of the diagram indicates some of the dimensions of evaluation which the significant others use in judging the competence and affiliativeness of their associates. Data from previous research show that children from a very early age are involved in being evaluated and evaluating others in terms of a variety of notions of performance or

competence and another cluster of notions having to do with socio-emotional behavior. The success and frustration experiences the child has in growing up during the pre-school years are determined to a large degree by the way in which he is helped and is able to convert his personal properties and environmental opportunities into valued personal and interpersonal resources, and by the degree to which he is able to utilize his resources in the process of interpersonal learning with peers and grownups. We will focus on this process of utilization in a later section of this chapter. Many of our collaborating teachers have found it helpful to use this descriptive theory of personal resource development as a way of thinking about and studying the individual differences in the backgrounds and development of their pupils.

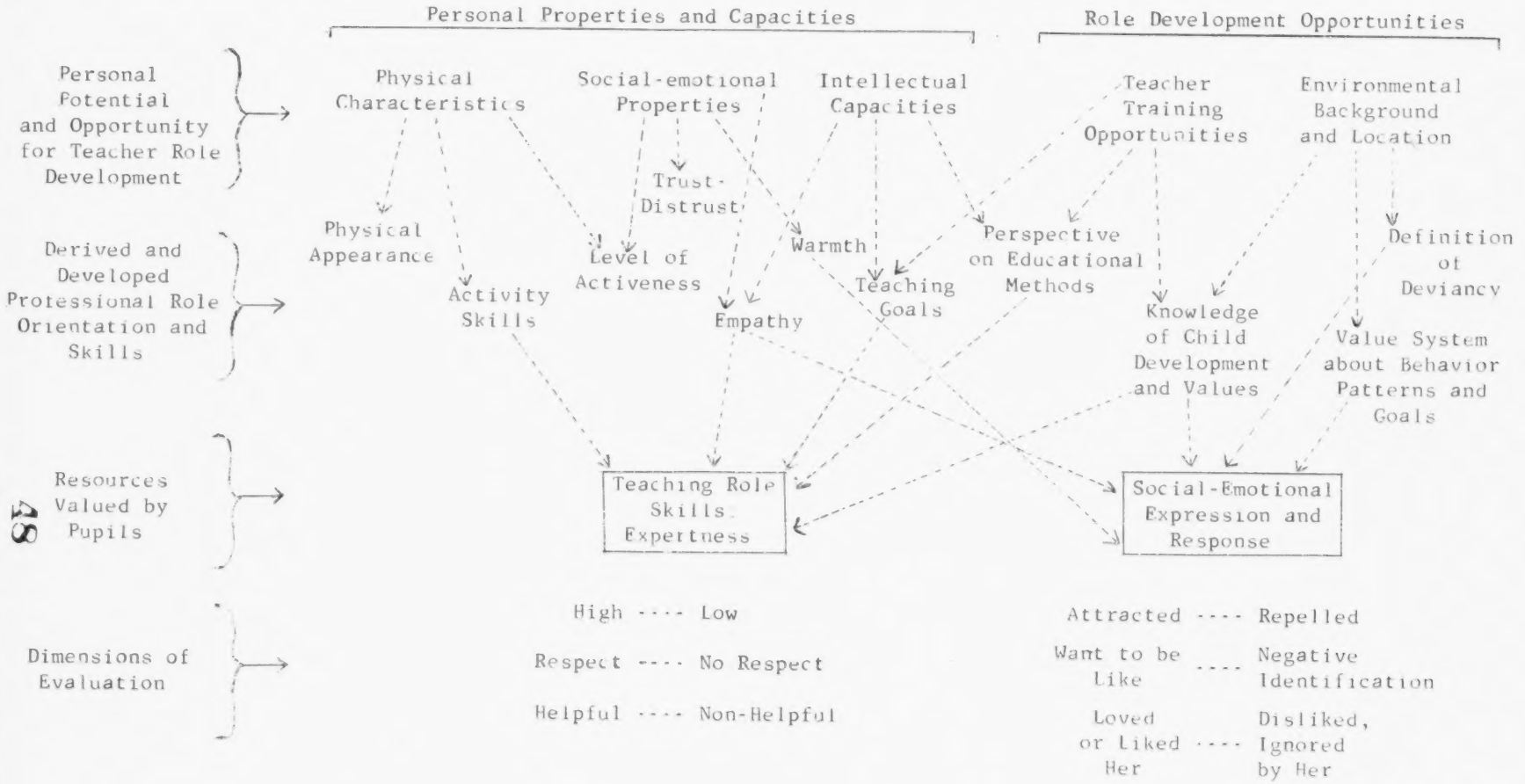
Thinking about the Teacher in This Way

As the child enters school, he begins to learn the role of pupil, and member of a classroom group, he meets the new figure called "teacher." The teacher, of course, also has a background of development which it is helpful to understand in order to predict and interpret classroom life more adequately. We have found it helpful to use the same concepts and conceptual diagram to think about the development of the personal and interpersonal resources which lie behind the professional role-taking as teacher. Figure 8* is very similar to the one we just used to summarize the development of the child, although many of the facts represented in the diagram are different.

For example, we note that the unique professional skills and orientations which the teacher develops derive from her basic physical, social-emotional, and intellectual characteristics, from her experiences in the social and economic system, and from her training opportunities.

FIGURE 8

BASIS AND DEVELOPMENT OF ROLE RESOURCES OF TEACHERS



Just as in the case of the pupil, a particular teacher role characteristic such as expressiveness or understanding or teaching goals arise as results of multiple influences from his background characteristics and from his experience opportunities. There are no doubt many personal characteristics of the individual who is a teacher which do not become the subject of evaluation by pupils and therefore would not be regarded as relationship resources in the sense defined by the above interpersonal resource theory. Although in our studies we have made no intensive analysis of evaluation of teachers by pupils, the group interviews which we have conducted with groups of pupils about their teachers reveal clearly that there is a well developed evaluation system (e.g., there are clear expectations as to what the new teacher will be like even before the first day of school in the fall). The dimensions of evaluation which the pupils used in the group interviews certainly included those indicated in the bottom row of the diagram.

The adult who is developing a teacher role probably receives less feedback from children to guide development of his teaching role resources than the child receives from grownups or peers to guide the development of his resources. Moreover, it is probably true that the teacher has developed more criteria for self guidance as a part of his growth and development process than has the less experienced pupil.

To summarize this section, we have presented a conceptual scheme about interpersonal resources and their development. We have noted that both children and teachers are evaluated in interpersonal interaction in terms of criteria having to do with competence or expertness and affiliativeness or social-emotional patterns of relating to others. This evaluation by others is what defines interpersonal resources, and awareness of these definitions provides the individual with success and failure experiences

which guide his growth as he attempts to actualize his personal properties or potentialities and particular opportunity situations which are available to him. In later sections of this chapter, we will want to continue this exploration of how the developed resources are actually utilized in initiating, maintaining and developing the interpersonal relationships which make up the context of classroom life.

Continuities and Discontinuities of the Socialization Process at School

When the child adds the sphere of school life to that of home and neighborhood life, many new opportunities, expectations, and problems enter his perceptual field. He is exposed to a whole new set of values and expectations about doing work in order to learn. He must work out ways of relating to a different grownup, the teacher. He finds himself coexisting with and being compared with classmates of the same age as he is. He is a part of a big, bustling organization called school, with a variety of adults, older children, and other like-age peers who have some interest in the way he behaves and performs in school. Several major fields of influence impinge on his thinking and behavior each day. Part of each day he is in the family circle, relating to and interacting with his mother, his father, and any brothers and sisters he may have. Part of the day he is in the school circle, interacting and relating to his teacher, to his classmates, and to the older children in the school. In social psychology, this phenomenon of being related to and being influenced by different groups and persons is thought of in terms of reference group theory and in terms of overlapping memberships or multiple loyalties.

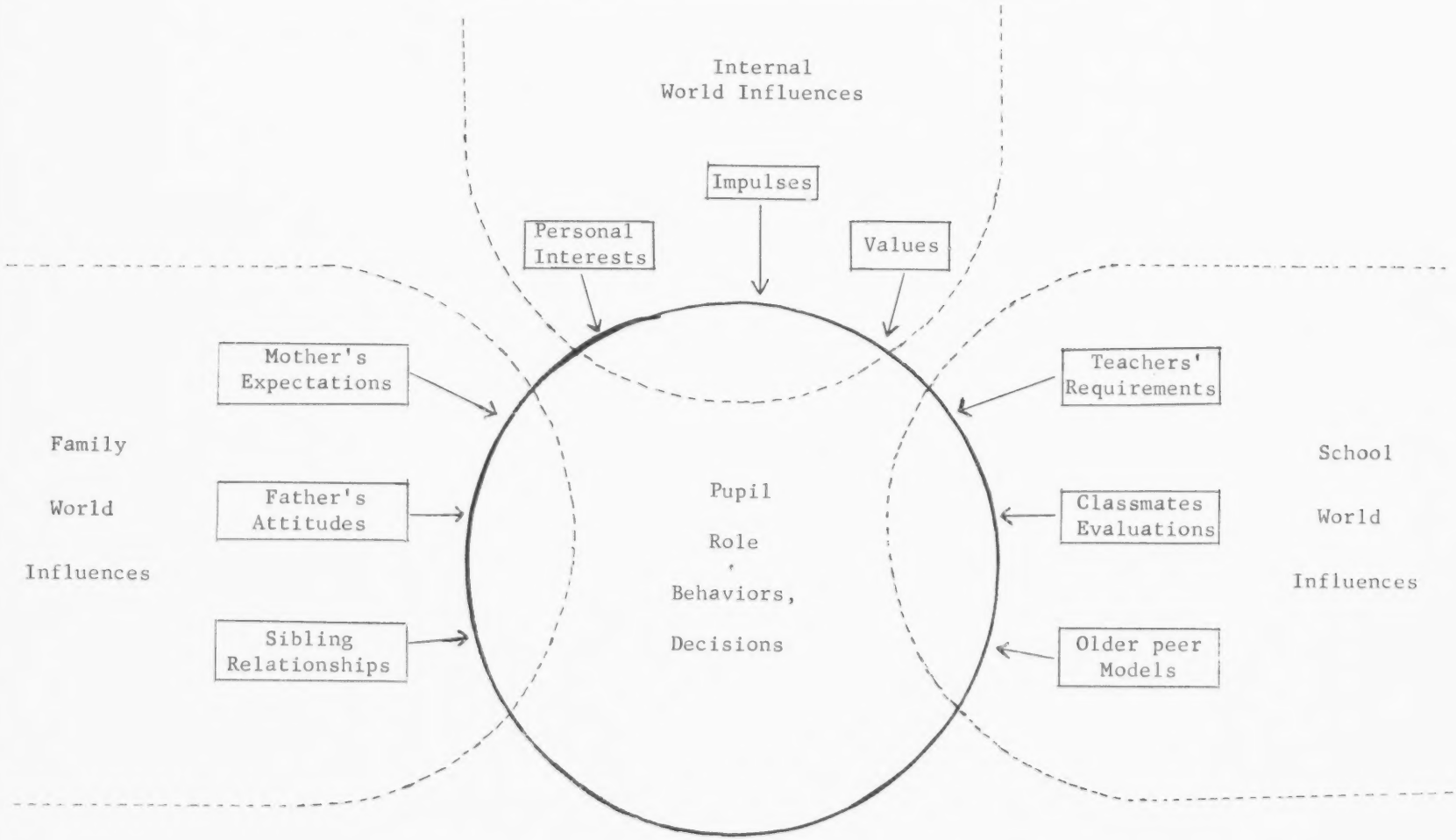
The concept of reference groups is very simply the idea that each person is not a simple, autonomous system but is related to other groups and individuals who serve as guides or "references" for his values and

intentions and behaviors. Even when he is not directly interacting with them, his ideas about "how they would react" serve as a reference for him in guiding his decisions and actions. The idea of overlapping membership is a very similar idea. Because the person belongs simultaneously to several groups or relationships, these influence fields from the different references intersect and overlap in their influence fields as they impinge on or include the individual. This means that the individual may experience tugs and pulls or pushes in more than one direction simultaneously because of the overlapping influence of his several different references or objects of loyalty. Figure 9 presents a simplified representation of the overlapping membership situation for our young school pupils.

The reader will note that the center circle represents pupil role behaviors - individual decision, action, and values of the young one as a pupil at school. The three intersecting fields represented by the dotted lines indicate that pupil role activity is influenced by three spheres of influence - school influences, family influences, and self-influences (e.g., autonomously generated needs, interests, impulses, and personal reactions to others). Three separate types of school influences are identified, relationships with teachers, with like-age classmates, and older child models at school. Three family references are identified; mother, father, and siblings. Three types of self-influences are suggested, those influences which represent the self-gratifying pleasure seeking, aspects of personal dynamics (impulses), those forces within the self which represent the other-oriented, socially integrative self-interests, and those forces represented by personal values about what is right and wrong. All of these forces are actively involved in determining and guiding the role behavior of pupils as it develops and unfolds in the daily process of

FIGURE 9

REFERENCE FIGURES AND MULTIPLE LOYALTIES FOR THE PUPIL



classroom life. This medley of voices presents some children with many more problems than others. For some children the voices speak with a fair amount of orchestration; for others there is much conflicting dissonance. It will be helpful for us as educators to examine as thoughtfully as we can the nature of the child's experience with these multiple influences. What are some of the characteristics of the child's experience with the multiple influences that determine whether the experience will be one of continuity and orchestration or one of discontinuity and dissonance? These five aspects of his experience seem important:

1. Similarity or dissimilarity of direction of influence. As some children move from parental relations to relations with teachers, they experience a substantial similarity in the kind of expectations and values which are held for their behavior and directions of development. There are similar definitions of achievement priorities and of valued styles of human relationships. Other children experience striking dissimilarity with which to cope. All children experience some degree of dissimilarity in the expectations and standards of their parents and their teachers, and also usually a substantial dissimilarity between standards promoted by their teacher and the norms of the peer group. Certainly the degree and type of dissimilarity experienced in the influences from the different reference sources is an important determiner of continuity and support or discontinuity and disruption of learning experiences.

2. Predictability or unpredictability of influence pattern is another significant aspect of experience. To a high degree the child's psychological space of free movement to take initiative and to set his own goals is determined by the degree to which there is clarity of standards and expectations from his different reference sources. Unpredictability as to "what they will do next" or "what they will expect next" presents

the child with a major dilemma as to how to take a particular relationship into account in making his decisions and guiding his actions.

3. Acceptance or rejection by the significant others is another major dimension of a child's experience. If the child feels he experiences more rejection from his parents and more acceptance from his teacher, he is likely to orient his world in such a way as to shut out legitimate expectations from his family world; or if he feels he experiences rejection from his teacher but acceptance from his peer group or classmates, he is likely to develop an orientation toward school work and teachers which will shut out the potentialities of influence and support from present and future teachers.

4. Success or failure of performance efforts is a fourth dimension of a child's experience with his reference figures. If a child experiences failure in the teacher's evaluation of his performance and competence, but success in his efforts to achieve status and acceptance from his peers, this will greatly determine his degree of readiness to accept influence from the two sources. If he has felt devalued or unappreciated by his parents and rewarded by his teacher, this will again introduce dissonance into his world of influence relationships.

5. Perceived agreement and connectedness or disagreement and separateness among his various significant others is a fifth important determinant of a child's sense of continuity or discontinuity in his world of relationships. Some children perceive that their parents are in communication and collaboration with their teachers and the school, or they perceive the peer leaders of the classroom group as friendly toward and in cooperation with the teacher. Other children perceive their parents as antagonistic toward their teacher, or they perceive that leaders of the

classroom peer group are at war with the teacher. These perceptions of harmony or disharmony in the relationships between the various agents of influence is an important determiner of the tension created in the child as he copes with the problems of integrating within himself the different sources of influence which he experiences around a given decision or behavioral situation.

This leads us to an interesting and very important question: What types of problem-solving patterns do children develop and use to cope with the medley of voices in their multiple loyalty situations? How do they achieve integration and selfhood in coping with the variety of influences?

Coping with Problems of Multiple Loyalty.

We have been able to differentiate at least five different patterns of problem solving adopted by pupils in coping with the differences in expectations, pressures and needs from parents, teacher, peers, and the self. The same child may, of course, adopt several of these coping patterns in different decision and action situations.

1. Compartmentalized loyalty. One tempting and frequent way to avoid the stress of recognizing and taking into account conflicting loyalty pressures is to avoid the confrontation, to deny that there is an issue of conflict. Although sometimes this requires a great deal of psychological energy, some pupils are remarkably successful in keeping their relationships in separate compartments of the self. When they are with their parents, their teachers and peer associates do not exist. And likewise when they are with their teacher, their parents have no psychological existence. This type of situational and relationship opportunism can be carried to remarkable lengths to avoid internal confrontation and

conflict. One consequence is certainly a delay in the development of an integrated personal identity which emerges from personal decision-making and the development of the self out of the confrontation, internalization, and integration of the many environmental influences.

2. The pervasive dominant loyalty. Another way to simplify life in resolving the complexities of conflicting influences is to make one of the reference sources the psychologically dominant one to provide guidance in all situations. By making loyalty to a mother, or to a best peer friend, the dominant loyalty, it is possible to avoid a great deal of discomfort in decision making. One can stop listening to the voices of the others as irrelevant, or can quickly and easily reject the competing messages as incorrect or misleading. In many situations of conflict between the voices of the peer group and the voices of the grownups, the pupil adopts the policy of listening to one and rationalizing a rejection of the other in order to make the decision situation easier and to avoid the pain of the "working through process" which would be required. One of the consequences, of course, of selecting a dominant external voice among the various referent sources is that the child tends to inhibit the development and use of his own internal voice as a legitimate guide.

3. Rejecting the references. This third solution is chosen by both the young and old. It might be called "the plague on both your houses" solution. The sense of irritation and confusion which results from being exposed to inconsistent and competing demands and expectations is reacted to, in this case, by a psychological response which in effect says, "If you can't agree, then there are no authoritative standards and I am free to do what seems most attractive to me." This resolution receives support from the child's needs for autonomy and the attractiveness

of the pleasure-seeking impulses which are one of the inner voices in most decision situations. The child's experience with the inconsistencies between demands and expectations of parents and teachers can easily provide the context and motivation for this "autonomy resolution".

4. Striking a balance. Many children try conscientiously and anxiously to listen to all the voices and to arrive at some kind of compromise that will somehow please everybody. More frequently than not this attempt to balance all the voices in the situation results in dissatisfaction and discontent. And certainly there is very little gain in the development of self identity from this posture of mechanical compromise or "striking an average." This is, however, one of the most natural first attempts at resolution of the problem of the medley of voices and usually it is the experience of lack of success in dealing with this kind of complexity which pushes the child toward finding a simpler resolution, such as the three already described.

5. Creative integration and reciprocal influence. In this fifth pattern the child has learned that the decision and the action genuinely "belong to him" but that he has the responsibility and opportunity to listen to and to seek out the ideas of the others as resource material for himself. A second thing he has learned is that he is not just a target of influence pressures from others but that he is in a reciprocal relationship with others and has the right and responsibility to attempt to influence them and the direction of their influence attempts on him. Mental health and intellectual development flow from the pupil's discovery and development of the possibility of this basic posture of interdependence (as contrasted to independence or dependence) in interpersonal decision making and interaction. One of the basic goals of education is simply to help the pupil discover and achieve

this problem-solving, reciprocal-influence orientation. In this way the overlapping influence fields of the school, the family and the self can become an opportunity for creative conflict and growth rather than disruptive demoralization and the prevention of development of personal identity.

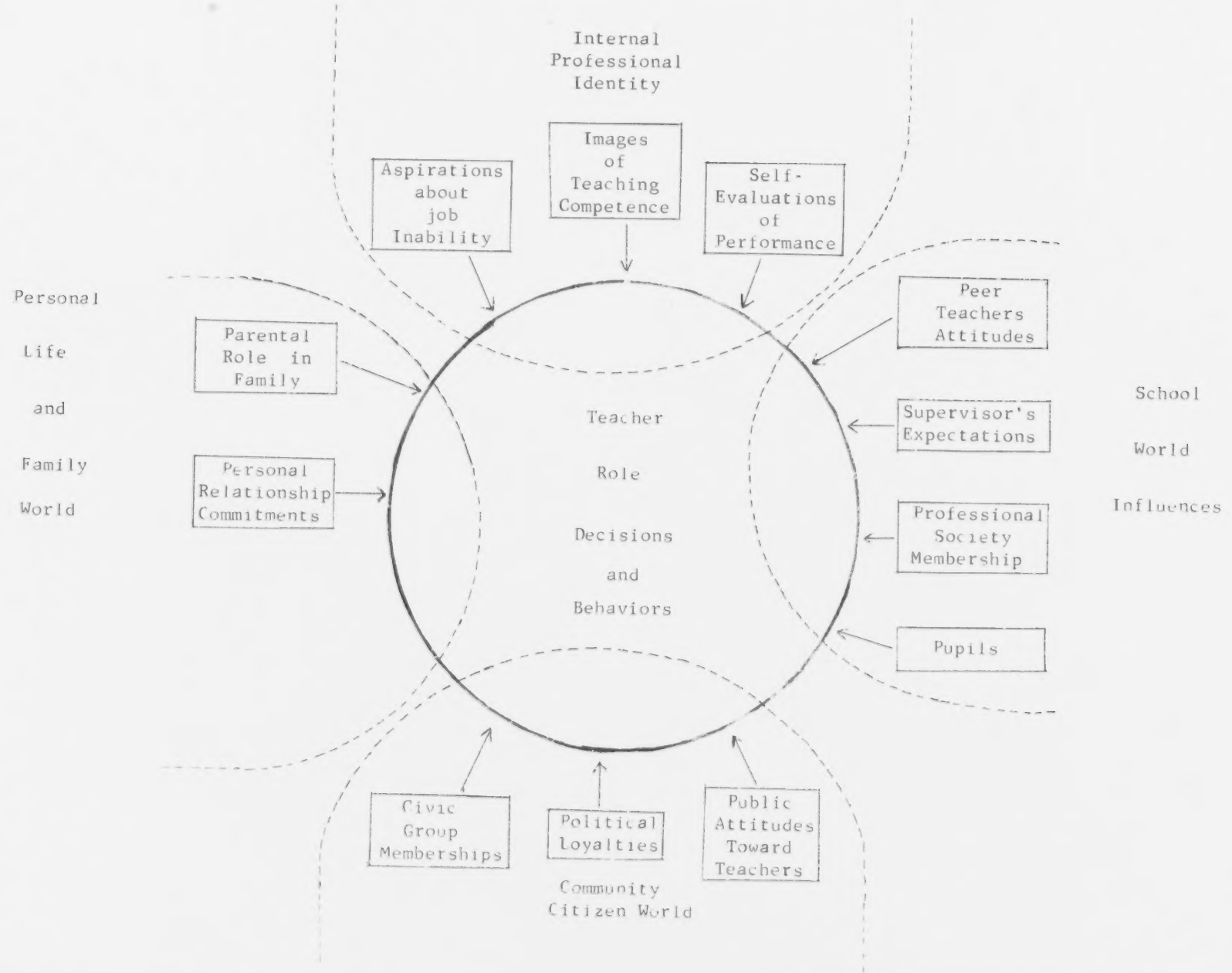
A Teacher Has This Problem, Too.

We must not forget the teacher in our focus on the pupil and the student. The teacher's behavior in the classroom is also influenced by the multiple loyalties and references which are psychologically present for him at all times. In Figure 10 we have noted four overlapping worlds of influence: 1) relationships in the school with pupils, teacher peers, supervisors and administrators; 2) his world of influences as a community citizen with its variety of relationships and expectations; 3) his personal and family life with its obligations and relationships, 4) and his internal world of professional role identity as a teacher with the many images, intentions, aspirations, and expectations which represent forces from his "professional personality." Certainly the teacher is subjected to even a greater variety of cross-pressures and conflicting expectations from multiple loyalty relationships than is the child. No doubt the teacher has arrived at more sophisticated patterns of problem solving but it is our experience that the same five patterns discussed above are present in varying degrees for all of us as adults, and a sensitivity to these patterns will help us understand and interpret the behavior of the teacher as well as that of the pupil as we study learning and interaction in the classroom.

From the point of view of our research interest one of the important explorations is to discover the ways in which the teacher integrates the influences from "the voices of the children" (e.g. pupil interests, expectations, abilities) and the influences from his other reference figures.

FIGURE 10

REFERENCE FIGURES AND MULTIPLE LOYALTIES FOR THE TEACHER



In Summary.

Let's review briefly this second theoretical framework for interpreting our observations about classroom life and the understanding and interactions between pupils and teachers. We have said that it is helpful to think of each person as existing in a field of relationships to other persons and groups who have significant influence on the way he will think, decide and behave in any decision or action situation (e.g., the classroom). In the case of the child these references or influence agents have differing values and expectations about his orientation to school performance and about approved and disapproved social and emotional behavior. We have said that the complexity of the individual's problems in dealing with his multiple relations will depend on the degree to which these represent a meaningful continuity of experience for him or represent discontinuity and conflict. We have identified several dimensions of the child's or teacher's experience which determine whether he or she experiences continuity or discontinuity in relations with major influence agents. Finally, we have recognized that in any process of growing up and functioning in this context of multiple relationships, there will be experiences of dissonance and discontinuity. Expectations and values will be in conflict. Therefore, the individual will be continuously faced with the problem of coping with competing and conflicting influence inputs. Various problem-solving postures can be adapted to cope with this complexity. We've reviewed five orientations which it seems helpful to identify and understand in the behavior of both pupils and teachers. We are now ready to turn to a third conceptual framework which the action research team has found helpful in understanding classroom life.

The Circular Process of Resource Exchange in Classroom Relationships

Earlier in the chapter we looked at the processes of interpersonal evaluation that are going on continuously in the classroom. In the diagram of interpersonal characteristics and resources we identified the linking process between the child's personal characteristics and the process of evaluation by others which results in the child receiving some level of acceptance-status and influence-status in the classroom group. We stated that the positive and negative evaluations of the characteristics and skills of a member by his fellow members might be thought of as defining his resources as a member of that particular group. One way of looking at the interaction process in any group or between any two persons, is to think of it as a process of exchange of personal resources, or of attempts to exchange or to resist the exchange of personal resources. The pupil who sees himself as competent in physical skills or in academic ability may attempt to actualize his resources by offering to help someone with less skill (transmit some of his resource), or by using his physical prowess to force someone to do what he wants them to do (i.e., convert his resource into personal power). Or a pupil in need of help on schoolwork, may initiate an effort to utilize the resources he perceives a classmate as having by asking for help. The resource of being loved or liked can also be analyzed in terms of the actualization efforts initiated by the possessor of the resource to express friendly feelings toward others, or to exert influence over those that are attractive to him.

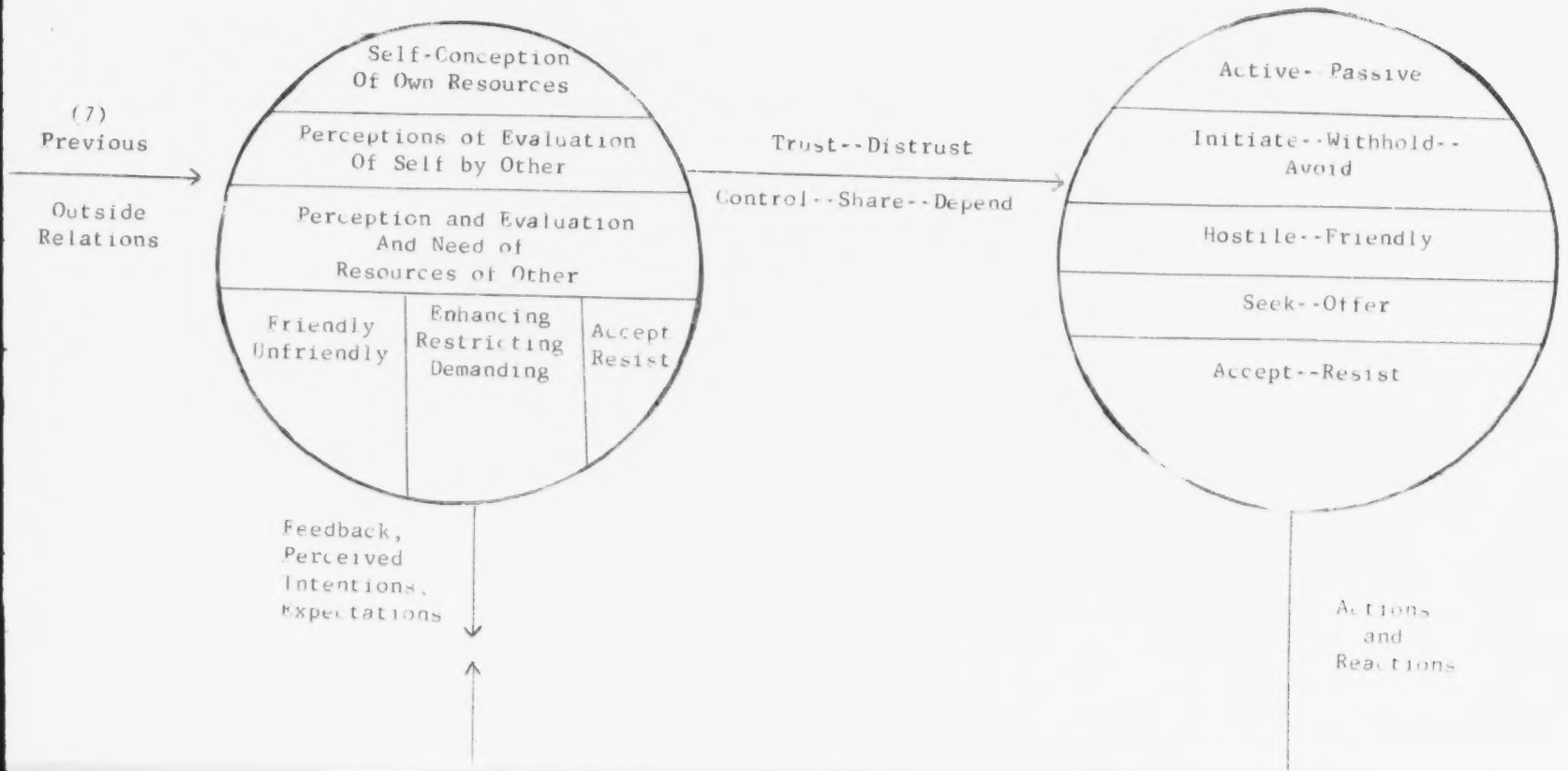
One important fact is that these processes of actualization and utilization of resources quite rapidly become stable and predictable processess of interaction between members of the group. Relative status as a resource possessor and a resource actualizer tends to become stabilized

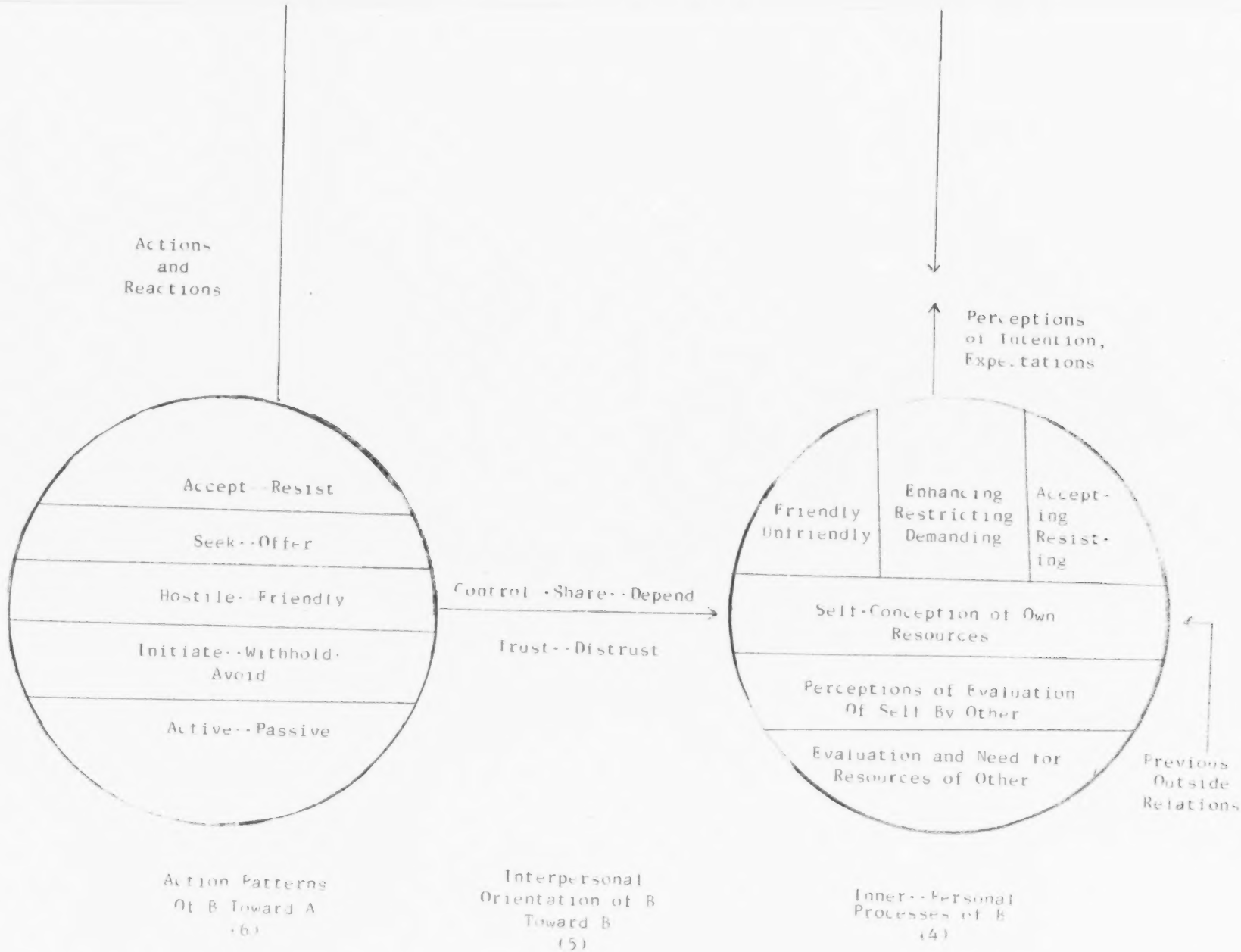
as our repeated measures of the same classroom group during the school year indicate. This process of reciprocal resource evaluation and exchange can best be conceptualized as a circular interpersonal or social process. We, and the collaborating classroom teachers, have found this theoretical model of the circular process very helpful in interpreting and predicting social acceptance, achievement motivation, teacher-pupil relations and other classroom processes. Let's look at the elements of this circular process and the way in which they are connected, as illustrated in Figure 11.

Because this is a circular relationship process between two parties, we could start at any point on the diagram and go around but we have numbered the elements of this particular circle to start in the upper left-hand corner. We are illustrating the process of relationship between any two persons in the classroom group. It might be pupil A and pupil B or it might be teacher A and pupil B. The upper left-hand circle indicates some of the significant processes within the member A (1). For the moment we will look only at the upper half of that circle and come back later to the lower half. We see that the inner psychological processes of A include his own self-conception of his interpersonal resources such as his conception of his own competence, his self-esteem. A second inner fact is his perception of the way in which he is evaluated by the other member. A third inner process is the way in which he perceives and evaluates the resources of his fellow member B and feels a need for such resources. How much does he respect his competence? How much does he like him? Emergent from these interpersonal conceptions and evaluations is what we have called the "interpersonal intentions or orientations of A towards B" (2). On the diagram we have indicated two important

FIGURE 11

THE INTERPERSONAL CIRCULAR RESOURCE-EXCHANGE PROCESS




Actions
and
Reactions
Accept--Resist
Seek--Offer
Hostile--Friendly
Initiate--Withhold-
Avoid
Active--Passive
Control--Share--Depend
Trust--Distrust
Perceptions
of Intention,
Expectations
Friendly
Unfriendly
Enhancing
Restricting
Demanding
Accept-
ing
Resist-
ing
Self-Conception of Own
Resources
Perceptions of Evaluation
Of Self By Other
Evaluation and Need for
Resources of Other
Previous
Outside
Relations
Action Patterns
Of B Toward A
(6)
Interpersonal
Orientation of B
Toward B
(5)
Inner--Personal
Processes of B
(4)

elements of such orientations. Does he trust or distrust the intentions of B toward himself? Is his own orientation toward B one of wanting to dominate and control him, one of wanting to share resources with him or one of wanting to be dependent on him for resources he feels he needs and does not have? This action intention toward B results in certain observable behavioral patterns in his interaction with B (3). In the diagram we indicate five important dimensions of such action patterns. Is A active in his relation to B or does he tend to be passive? Does he initiate or does he withhold and avoid interaction? Can the behavior which A produces be interpreted as hostile or friendly toward B? Is his behavior primarily seeking resources from B or offering resources to B? And can his behavior be coded primarily as accepting the influence of B or primarily resisting and rejecting the influence from B. As the downward arrow indicates, we think of these behaviors as actions toward B or feedback to B in response to his actions. And the upward arrow from B indicates that all of A's behaviors are actively perceived and interpreted in terms of expectations for how A will behave and result in interpretations by B of what A's intentions are.

The lower right-hand circle represents the inner processes within B (4). In the upper half of the circle we note that B actively interprets whether the behavior of A is friendly or unfriendly; whether it supports and enhances his own needs or whether he feels it as restricting or demanding; and whether he feels that A's behavior indicates acceptance or resistance to his own efforts to influence A. The lower half of circle 4 (like the upper half of circle 1) indicates that B is always interpreting the behavior of A in terms of his conceptions and evaluations of his own resources, his perception of the way A evaluates his own resources, and

his perceptions and evaluations of the resources A has and is able to mobilize (to either help or attack or compete).

From these interpersonal processes of B as he reacts to the behavior of A and to his own conception of his own resources, emerges the interpersonal action orientation of B toward A (5). Is he oriented toward controlling, sharing or dependency? Does he feel trust or distrust toward A? From this action orientation toward A we see in the lower left-hand circle (6) the action patterns which B directs toward A. A actively processes this incoming behavior from B in terms of his expectations and his orientation toward interpreting the intentions and meanings of B's behavior. Is it friendly or unfriendly? Is it accepting or resisting? Is it helping or restricting?

Before turning to specific illustrations of this process in the classroom, one more element in the diagram needs to be noted - the two arrows coming in from the outside world (7) to impinge on both A and B. These arrows symbolize the fact that this relationship cycle is not a closed circle, a world unto itself. Both A and B have had previous relationships where they have developed expectations and interpretations of the behaviors of others. Also, as we have noted in the previous section of this chapter, they are now involved in other current relationships which are always present to some degree in determining their needs and reactions. These outside influences may either reinforce or disrupt the particular relationship circle we are studying.

Illustrations of Positive, Negative, and Collusive Cycles in Peers Relations in the Classroom

1. A typical positive cycle

In one kind of positive relationship cycle pupil A has a positive evaluation of his own competence and likability, perceives that B has a

positive evaluation of him, and he has a positive evaluation of B. His action orientation toward B is one of trust and one of readiness and expectation, of sharing resources and influence on a reciprocal basis. So A's behavior patterns toward B tend to show a balance of both seeking and offering resources, and of relatively open acceptance of B's approaches. At the same time B has a readiness to resist where he feels it is appropriate, without this being a threat to the A-B relationship. B's expectations for the behavior of A are of friendliness, of supportive enhancement, and of openness and acceptance. The relationship is based on his own positive self-evaluation, his perception of the positive evaluation by A of himself, his own feelings of attraction to A, and his resources which result in a trusting orientation evoking similar patterns of behavior from A. Therefore a continuing cycle of positive evaluation emerges along with a sense of shared rewards and enhancement from the continuing relationship. A and B are friendly toward each other and respect each other.

2. A typical illustration of a negative cycle of peer relationship.

In our analysis of classroom life we have found several types of negative non-supportive relationship cycles which have become stabilized as a circular processes between classroom members. In one type of cycle member A has a personal conception of inadequacy, perceives that he is viewed as inadequate by B and has a perception of B as much more adequate and possessing needed resources. His initial action orientation toward B is one of hopeful trust and of a desire for dependency which results in action patterns of active friendly seeking for support and direction from B and a readiness to accept such support. B has a self-conception of personal adequacy, a negative evaluation of A and experiences the incoming behavior from A as demanding and restricting and very often as

envy or unconscious hostility. From this inner process for evaluation emerges a distrusting and dominative orientation which results in a combination of unfriendly dominating behavior and unfriendly avoiding and resisting behaviors by B. In turn, this is experienced as unfriendly and non-enhancing feedback by A whose distrust orientation is intensified and whose failure to achieve the rewarding dependency leads to hostile withdrawal and avoidance of relationships which would bring about more pain. And so a stable cycle of unfriendly rejection and avoidance is established and maintains itself.

3. Another typical negative cycle

Another frequent cycle is one in which member A has a positive evaluation of his own resources, particularly his physical resources, perceives himself as negatively evaluated by B and negatively evaluates B. His action orientation toward B is one of distrust and of desire to control. This results in a pattern of actively hostile influence attempts and active resistance of the influence attempts of B. B perceives A's behavior as unfriendly, restricting and demanding and is oriented toward resistance, based on his own self-conception of relative adequacy in relation to A, his perception of A's negative evaluation of him and his negative evaluation of A. From A's action orientation B starts familiar competitive hostile resistance pattern of influence attempts toward A which are interpreted by A as confirming his own distrust orientation and accentuating his need to control B. This establishes a mutual cycle of distrust and control orientation and mutual resistance to influence attempts on each other, a continuing non-rewarding competitive cycle. Other mutual cycles of separative alienation or of competitive hostility have been observed. The above represent two typical illustrations.

4. Collusively satisfying unhealthy cycles of peer relationships.

We do find a third relationship pattern which is neither mutually supportive of healthy development nor mutually dissatisfying and alienative. This third pattern of relationship is one in which the two interacting members are finding psychological satisfaction, but the satisfaction is based on an exchange of interpersonal resources which is growth inhibiting for both members. A good example of this is a situation where A has a need to cope with his own negative self-evaluation by controlling B who he devalues but who he perceives has a dependency orientation toward him. This results in active dominating behavior which B submissively accepts because of his own sense of inadequacy, and his readiness to be "used" rather than ignored. His positive evaluation of the strength of A results in a trusting dependency with active, friendly, seeking, accepting behavior toward A which enhances A's self-evaluation and stimulates and supports his dominating, non-reciprocal pattern of action toward B. So we see the development and maintenance of the support of A's defensive dominating and distrusting behavior pattern and of B's self-degrading dependency satisfactions. The gratifications inhibit the personal growth of both parties, although there is mutual satisfaction in the relationship.

5. Outside support for positive, negative and collusive cycles.

Earlier we discussed the continuity or discontinuity of the child experiences in relation to his multiple human references. We are now able to look at these ideas in a new way. The circular process which we have illustrated is the relationship of the child to one human reference, a fellow pupil or pupils in the case we have illustrated. Our diagram indicates that this particular relationship is influenced by other outside or additional relationships which are illustrated by the outside influence arrows (7). In our previous discussion we noted that these outside influences

may be strong or weak depending on whether it is an attractive or a rejecting relationship, or whether it is seen as relevant and connected or disconnected with the present relationship. In our discussion of the child's problems of coping with his multiple loyalty relationships we looked at several ways in which the child rejects or takes into account one relationship when he is engaged in interacting in another relationship. We are interested in what he does with influence from his parents when he is interacting with the teacher, or what he does in reacting to influence from his peers when he is relating to the teacher. We are now ready to carry the analysis further and ask what kinds of "other relationships" tend to help the child develop and maintain positive cycles of relationship with his peers in contrast to those relationships which tend to push towards negative cycles or unhealthy collusive cycles? This is certainly a crucial question when we stop to think about possibilities of changing unhealthy cycles into healthy cycles. If some of the major causes which are stimulating and maintaining a relationship are coming from outside, from other relationships, then it requires quite a different approach for giving help as compared to the case where the major factors causing the problem are within the relationship itself and are accessible to a helping effort through work directly with the two parties.

Let's review several examples of the way the child's relationships (past and present) outside the classroom may effect the cycles he establishes with fellow pupils, and with the teacher.

1. A dependency relationship to protective and assertive parents may incline the child toward seeking and maintaining a dependency relationship to strong peer leaders or to the teacher, although if the outside relation with the parent figures is frustrating and there is negative feeling about parental figures then the child may be seeking peers he can

dominate, and may be oriented toward finding ways to avoid the influence of the teacher.

2. An experience of personal autonomy in outside relations, of being left on his own, may incline the child toward a posture of finding someone to lean on and depend on, or toward a resistance to any attempts of others to control his behavior.

3. A successful outside experience of dominating younger siblings, or parents, is likely to incline the pupil toward attempts to establish peer relationship cycles of dominance-submission. Also he will probably attempt to resist the leadership of the teacher and be competitive with the teacher.

4. Other children come to school with a background of inter-dependent relationship patterns where the relationship cycle has been one of reciprocal influence and mutual exchange of personal resources with parents and brothers and sisters. Such a child will have an orientation that his parents are depending on him to do his best and to use his own judgment relating to others at school. His greater flexibility will help him in establishing emotionally positive and mutually rewarding relationship cycles with both fellow pupils and with the teacher.

The teacher-pupil relationship is a similar process

Again, as in the previous sections of this chapter, we want to emphasize that the same theoretical model for thinking about pupil relations applies to teacher-pupil relationships as well. All we need do is to put the teacher in a circular process diagram as A and the pupil, or group of pupils, as B. Then we recognize that the teacher's self-conception of his resources and skills as a teacher, his perception of the evaluations of himself by the pupils, and his evalution of the pupils

and their adequacy as learners are factors determining whether he has a trust or distrust orientation and a controlling or sharing orientation toward his pupils. These orientations are based on his experience with previous relationships in his own life history, as well as on his reactions to his current pupils. We also find growth inhibiting collusive relations between teacher and pupils as between a motherly, domineering teacher and a willingly dependent, non-disruptive group of pupils. One of the challenges of our empirical research is to discover the relationship between the type of pattern which exists in the classroom and the results in terms of learning achievement and mental health. And one of the challenges for every teacher is to achieve awareness of relationship patterns among his pupils and between his pupils and himself so that he is in a position to help support creative, productive relationships and to change the unproductive ones.

The Development and Maintenance of Total Classroom Relationship Structures and Operating Patterns

Another level of conceptualizing and analyzing the educational situation is to think about the classroom group as a whole, about classroom achievement and classroom mental health. Although the main criterion of success in the classroom is the personal growth and development of each pupil in relation to his own potentialities, still there is great value to having conceptual tools for thinking about the classroom situation as a totality. The teacher must think about the characteristics of her classroom situation and about her role in relation to the total classroom group. In this project we have tended to think conceptually in three ways about the classroom group. We have thought about group norms, about classroom interpersonal evaluation patterns and about ability utilization subgroups.

1. Group norms in the classroom

When we explore the question of why pupils evaluate each other positively or negatively, we typically find that a relatively low value is placed on expertness in classroom learning activities. We assume that the existence of a peer group norm about the importance of academic expertness as a basis for status in the group would be an important support for academic motivation. Another classroom norm which we have explored in some classrooms is the extent to which the pupils approve or disapprove of pupil collaboration with the teacher such as volunteering to recite. Here we have noticed the interesting fact that in some classrooms many pupils perceive that a majority of their classmates are against very active collaboration with the teacher, although in fact we do not find this feeling being expressed privately by their classmates. In other words, there is an attributed norm which functions like an actual group norm because of mutual ignorance and a lack of communication among the group members. In such classrooms, there is not a norm supporting the sharing of perceptions and beliefs between fellow students or between the students and teachers. The third area of classroom group norms in which we have been interested is whether a standard exists in the classroom accepting of individual differences in learning ability, or whether there is a norm which tends to expect and reward conformity to a particular model of "good student."

A great deal of experimental research on the development and functioning of group norms in small face-to-face groups has been conducted in the laboratory with adult groups. We need to test out the relevance of these findings for classroom groups of children where the interest is in understanding the support or inhibition of academic learning and personality development.

2. Group patterns of interpersonal evaluation in the classroom

Research by Schmuck (1962) has demonstrated the fact that in different classrooms there are quite different patterns of interpersonal evaluation. He has designated these as differences in the degree of diffusion or degree of centralization of the sociometric status structure. In some groups, the members distribute their positive or negative evaluation of other group members quite widely or "diffusely" so that all members receive a certain amount of positive acceptance or evaluation and small amount of critical evaluation. Such groups are distinguished by a fairly equal distribution of liking choices, by no distinct sub-groups whose members receive a large proportion of sociometric preferences, and by fewer entirely neglected pupils. In other groups there is a pile-up of positive and negative evaluation on a relatively few "central" members so that a few get most of the acceptance or rejection and the rest of the members receive very little. Such centrally structured groups are characterized by a large number of pupils who agree in selecting only a small cluster of their classmates as pupils they like. Along with this narrow focus on a small number of pupils, many others are neglected entirely. Work is continuing on these causes of these classroom phenomena and their impact on learning and mental health, but the evidence so far suggests that these types of group patterns do have important impacts on the motivation to learn and psychological mental health of the classroom members.

Another way in which groups differ is in the ratio of positive and negative evaluation of personal resources which exists within the group. In some groups there is a much higher number of positive feelings than negative feelings between members, while in other groups there is a

greater predominance of negative interpersonal evaluation. In some groups the interactions between the children reveal quite a high level of acceptance of each other's opinions and other types of influence attempts, while in other groups there is a much higher percentage of rejection or resistance to influence attempts than there is of acceptance. These group patterns of readiness or resistance to exchange of resources between members need to be studied much more than they have been. From the evidence we have to date, it is our assumption that such classroom patterns have a very potent impact on teacher-pupil relations and on the motivation to learn of the members of the classroom group.

3. "Utilization" subgroupings in the classroom

There is widespread interest by educators in the phenomena of high and low utilization of one's intellectual resources in classroom learning activities. We have developed a procedure for classifying the members of a classroom group into four subgroups: those with high ability and current evidence of high utilization of that ability in learning achievement, those with high ability but low evidence of utilization, those with low ability but high utilization of this ability, and those with low ability and low evidence of utilization. Several approaches have been made to the validity of looking at the classroom structure in this way. We have explored whether the pupils in these different classifications are viewing the teacher and their classroom experience in significantly different ways; whether they are being evaluated by their classmates in different ways; and whether they are being perceived and reacted to by their teacher in different ways. Although this approach to the analysis of the total classroom group represents a crude conceptualization, it has become clear that such a classification does lead to significant diagnostic insights about the functioning of the learning process in the total classroom.

It is clear from our explorations to date that there is great value to looking at parent-pupil, pupil-pupil and teacher-pupil relationships as the basis for understanding motivation to learn, effectiveness of learning activity, and the development of positive and negative mental health patterns. It is also clear that looking at the later two factors in terms of total classroom patterns, rather than just as interpersonal patterns adds greatly to our analytic power in understanding the classroom learning process. Specific hypotheses derived from some of the above concepts along with the empirical results appear in Chapters IV, V, VI, and VII.

Chapter III

RESEARCH METHODS AND VARIABLES*

The data reported in this study were derived from some public school classrooms in rural, industrial, suburban, and university communities. The data from each classroom were obtained from three sources: (a) questionnaires and group interviews with pupils, (b) questionnaires and interviews with teachers, and (c) a brief period of classroom observation.

The Sample

The sample was selected from a group of teachers in southeastern Michigan who volunteered to participate in the project. The selection of teachers from the volunteers was determined by the objective of sampling a diverse representation of types of communities and grade levels. As a result, a subject pool comprising 727 children was drawn from twenty-seven public school classrooms. Some basic data regarding the sample are provided in Table 5. The fathers' occupations for the pupils in the sample differ significantly from classroom to classroom. For instance, in one classroom ninety per cent of the fathers are professional, while in another, ninety-seven per cent are classified as unskilled. The racial composition ranges from predominantly Negro in one class to all White in others. The diversity of the sample suggests that the results are applicable to most midwest communities outside of large urban areas.

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* Richard Schmuck primarily is responsible for the contents of Chapter III.

TABLE 5

COMPOSITION OF THE SAMPLE

	Elementary (Grades 3-6)	Junior High School (Grades 7-9)	Senior High School (Grades 10-12)
Sex Distribution			
Boys	233	71	64
Girls	194	74	91
Totals	427	145	155
Occupation of Father*			
Business executive	0	0	0
Upper professional	55	5	1
Upper white collar and professional	61	28	17
Lower white collar and professional	49	30	32
Skilled	95	42	43
Semi-skilled	76	17	22
Unskilled	42	4	9
Farming	0	5	7
Intelligence Scores			
Mean I.Q.	109	**	**
Standard deviation	18		

*Our data concerning occupations of fathers are not complete. Death, divorce, separation, ambiguous responses, and unanswered items account for this incompleteness.

**Intelligence scores for the secondary school pupils are not reported since the scores do not represent current measures. These test scores were used only as a device to separate the pupils into high and low I.Q. groups for each classroom.

General Data Collection Procedures

All of the questionnaires were administered by members of the research team in the Spring of 1960 and again in 1961. The only exceptions to this general procedure were a short family background information form and a sentence completion test which were administered by the regular classroom teacher. Each teacher was instructed carefully in the standard administration procedure.

Nearly all of the pupils had the experience of filling out a shorter but similar questionnaire in the Fall of 1960. Children who did not have adequate reading skills to follow the questionnaire (which was read to all pupils by the examiner) were eliminated from the sample. Approximately two per cent of the original sample did not complete their questionnaires and therefore are not included in this sample. Hence this study does not include children with severe academic disabilities.

Direction of Causation

Since there are no experimental manipulations of the variables under study, the direction of causation will be impossible to determine. Indeed, the conceptual linkages outlined in Chapter II suggest conditions of circular causation. Personal characteristics, for instance, were viewed as affecting the structuring of classroom interpersonal relations which in turn were seen as having an effect on other personal characteristics. This process was viewed, then, as affecting performance. Nevertheless, the statistical manipulations of the data under study will only indicate where variable associations are significantly high or non-existent.

In spite of the methodological problem, some social psychological research does seem to indicate that interpersonal relations do influence both personal and performance phenomena related to classroom life.

Studies by Whyte (1943), Sherif, White and Harvey (1955), Hollingshead (1949); Gordon (1957), Coleman (1961); and Combs and Taylor (1952) support this orientation to causation. On the other hand, it is certainly possible and, in some cases, quite probable that classroom interpersonal relations take their form directly because of the academic and behavioral adjustment performances of individual pupils. In any case, the specific steps in the causal nexus connecting interpersonal relations with individual performance cannot be studied directly here.

Measuring the Major Variables

In this section, operational definitions are provided for the variables outlined in Chapter II and analysed in Chapter IV. Only the specific items used to develop variable indices are reproduced here. The complete battery of items, their instructions, and the detailed administration procedures are reported in the appendix. The specific instrument items used in this study appear below along with each operational statement.

Family Variables

Data for the following family variables were derived from a short family background information form.

Familial Social Class. Occupation of the father is used to assess the social class background of a pupil's family. Occupations are identified by three questions answered by the pupils, i.e., "Where does your father work? What is the name or title of his job?" and "What exactly does he do on the job?"

Occupations are coded on the basis of a modified census classification, but for purposes of this analysis are grouped into three social classes as follows: a) upper-middle class, consisting of upper

professional and upper white collar occupational categories, b) lower-middle class consisting of lower white collar and skilled workers, including farmers, and c) working class, including the semiskilled and unskilled categories. Table 6 summarizes the number of families in the sample in each of these three social classes.

TABLE 6

DISTRIBUTIONS OF FAMILIAL SOCIAL CLASS AND PARENTAL EDUCATION IN THE SAMPLE*

Familial Social Class	Frequency	(and per cent)
Upper Middle	167	(36)
Lower Middle	303	(47)
Working	180	(27)

Parental Education	Frequency (and per cent) Fathers	Mothers
Beyond College	89 (12)	35 (5)
College Graduate	96 (13)	128 (18)
Some College	57 (8)	50 (7)
High School Graduate	168 (23)	236 (33)
Some High School	113 (16)	105 (14)
Grade School	66 (9)	42 (6)
Don't Know	132 (19)	124 (17)

*These data are not complete. Death, divorce, separation, ambiguous responses, and unanswered items account for this incompleteness.

Parental Education. Information regarding educational attainment of parents is obtained from one of six alternative answers to the question, "How far did your father (mother) go in school?" Table 6 summarizes the

number of mothers and fathers at each educational level.

Maternal Employment. Each pupil is asked about whether his mother is employed, and if she is, whether she works full or part time.

Peer Group Variables

Group Informal Sociometric Structure. In each of three sociometric areas (liking, influence, and expertness) every pupil nominates four classmates who are high and four others who are low for him in that area.

A preliminary investigation of our data indicate that these three sociometric dimensions are not totally independent. In fact, each of these dimensions is related to each other at a moderate level of association. Liking and influence, for instance, show a correlation of about + .32, as measured by a Phi coefficient. Furthermore, Phi coefficients of + .31 and + .32 respectively are obtained for relations between expertness and liking, and expertness and influence. Since these Phi coefficients are all moderate, each of our dimensions will be analysed separately whenever this is appropriate. However, because of both the significant associations among these three sociometric areas and the nature of our theoretical framework, the liking sociometric area will be emphasized.

Two kinds of sociometric structures are used for analysis in this research. The first of these is referred to as a "centrally structured group," or one with a narrow focus of affection. In such a group, a large number of members agree in selecting a small group of individuals as the ones whom they "like the most," and they also agree in selecting a few other members as the ones whom they dislike. As a result of the narrow focus on a very few members who are most popular and another few who are most unpopular, there are many pupils who are neglected and are

mentioned by no one as being liked or disliked.

A second kind of informal pattern or sociometric structure is referred to as a "diffusely structured group," or one with a wide focus of popularity. In this kind of group there is a fairly equalized distribution of positive and negative choices. Here almost everyone is most liked or least liked by somebody. There are no distinct subgroups or cliques whose members receive a large proportion of the positive or negative preferences and there are few neglected members.

The following two operations represent the measures of our dimensions of sociometric structure under consideration:

(a) Positive Centrality-Diffuseness: Each pupil is awarded one "choice-status" whenever he is nominated by another pupil as high in a given area. Since each pupil chooses four pupils as "high" in an area, the mean "choice" score for the group is equal to four. The centrality of a structure increases as the variability of this "choice" score distribution increases. Low variability of this "choice" score distribution characterizes a sociometric structure approaching diffuseness.

(b) Negative Centrality-Diffuseness: Each pupil is awarded one "rejection-status" whenever he is nominated by another pupil as low in a given area. Since each pupil chooses four pupils as "low" in an area, the mean "rejection" score for the group is equal to four. The centrality of a structure increases and the diffuseness decreases as the variability of the

"choice" score distribution increases.

The directions and questions used for the collection of these sociometric data are presented in the appendix.

Group Affect. Each pupil designates on a nine-point scale how much he values each pupil in the class. A group mean and variance is obtained from this operation. The data for this variable were collected with the instrument entitled My Classmates which is presented in the appendix.

Actual Sociometric Position. The pupils in each class are rank-ordered according to their summed "choice status" or "rejection status" scores in a given sociometric area. This distribution can be split into quartiles or at the median in order to derive the high and low status pupils.

Teacher Variables

Teacher Liking for Pupils. A rating of the number of characteristics of a pupil liked by the teacher was used to measure "Teacher Liking for Pupils." A pupil was considered liked if he were rated above the median rating given by the teacher to the members of the class. The teacher was asked to rate the pupils on a nine-point scale which ran from a rating which implied that the teacher liked all of the characteristics of the child to liking none of his characteristics. The data for this variable were collected with the instrument entitled Your Pupils presented in the appendix.

Pupil Perceptual Variables

A sentence completion test, prepared for this research, provides data for three of the pupil perceptual variables. The test as a whole consists of 46 sentence stems, relating to different aspects of the child's life. It is exhibited in the appendix. Two indices are developed from clusters of stems, and two stems are used individually.

Attitude toward Self. An index of the pupil's attitudes toward himself is

based on the following three stems:

When I look in the mirror I
Sometimes I think I am
When I look at other boys and girls and then look at myself I feel

Each completed sentence is rated on a seven-point scale, according to the degree of positiveness or psychological health indicated by the response. The mean of the three ratings provides a "self-esteem index." An internal consistency check for this measure indicates that each single item contributes about the same to the overall index. For instance, the item "When I look in the mirror I . . ." is in agreement with the index 77 per cent of the time, for high and low designations. The other two items both agree with the total measure 72 per cent of the time. These moderately high and consistent percentages indicate a fair amount of internal consistency and imply that each item is contributing in its own right to the total index. An analysis of the inter-item associations also supports this latter point. Each of the items is moderately and positively correlated with every other item at levels ranging from +.36 to +.58.

The self-esteem index is consistent, also, with a different kind of self-evaluation. On an attitude questionnaire pupils are asked to rate each of their classmates and themselves on a nine-point scale, ranging from "a person who has only things about him you like" to "a person who has only things about him you don't like." A chi square analysis shows an association between the self-evaluation on this nine-point scale and the self-esteem index based on the three sentence completion stems ($p < .001$).

Attitude toward School. The following five sentence completion stems, similarly scored on a seven-point scale according to the degree of positiveness of the attitude toward school, are used to obtain a "school adjustment index" by computing the mean score of the five sentences.

My school work
Studying is
Homework is
Learning out of books is
This school

Analyses of both internal consistency and inter-item associations for this attitude toward school adjustment index are quite similar to those for the self-esteem index. Single item per cent agreement with the total index ranges from 68 per cent to 77 per cent, while inter-item correlations range from +.36 to +.54.

Pupil Perceptions of Parental Attitudes Toward School. A measurement of the pupil's perception of each of his parent's attitudes toward school is obtained from the following two sentence completion stems, which on the test are widely separated by stems dealing with other areas:

When I talk about school, my mother
When I talk about school, my father

Responses are rated on a seven point scale ranging from strong approval, affective support and interest in what the pupil has to say about school, ("is proud of me" "says I'm doing fine," "enjoys hearing about school,") to strong disapproval or negative affect ("makes wise cracks and school," "says the school isn't any good," "wants me to quit school") The coding of these responses also includes certain qualitative aspects. Supportive answers are divided into approval or affective support, active help with schoolwork, and achievement emphasis. On the nonsupportive side categories such as lack of interest, threat, and lack of understanding are used.

For most analyses only the degree of support-nonsupport is used. Where a hypothesis refers to "parents" rather than to mother or father, an average of the two measurements is used. This is referred to as the "Parental support of school index."

Analyses of rater reliability for both the attitude toward self and the attitude toward school indices indicate 95 per cent agreement for high-low scoring. On the two items relating to parents attitudes toward school, which were scored on a more complex two column code, with a total of 27 categories, there was 84 per cent agreement between two raters. Thus it appears that the scoring procedure used affords very high reliability.

Importance of Parents. Each pupil is asked to rank order the significant people in his life on the basis of "which ones he talks to most about important things." He ranks the following people: my close friend(s) in this class, others in this class, my mother, friend(s) not in this class, the teacher in this class, and my father.

Perceived Sociometric Position. Each pupil in every class is asked to estimate whether he is in the first, second, third, or fourth quarter of the class in a particular sociometric area. Thus, each pupil can be designated as perceiving himself as holding either a high (2nd and 1st quartiles) or low (4th and 3rd quartiles) sociometric position. The questions used in collecting these data are in the appendix.

Potency of Individual Involvement. Each pupil designates how many people (his age) outside the classroom he likes the same or better than the people in the classroom. A classroom median can be used to distinguish high involvement from low involvement for each pupil (See appendix).

Isolation. Isolation is defined as the assignment by the pupil of a low reward value to attitudes which he sees as highly valued by the classroom group. The assignment of a low reward value is inferred from a lack of congruence between how the pupil values classroom relevant behaviors and the attitudes he attributes to other classroom members. In order to measure

congruence between the pupil's attitudes and those which he attributes to others. each pupil is given the following series of statements dealing with classroom attitudes.

1. It is good to take part as much as possible in classroom work.
2. Asking the teacher for help is a good thing to do.
3. Getting along with your classmates is more important than school work.
4. School work is more fun than not fun.
5. The teacher really understands how pupils feel.
6. If you work very hard others in this class will not like it.
7. The teacher expects pupils to put too much time on school work.

The pupil was first asked to indicate how he himself feels about these things, putting his answer on a five-point scale ranging from "I agree almost always" to "I disagree almost always."

He was then asked how he thinks his teacher feels and how he thinks his best friends in the class feel. These were also on a five-point scale ranging from a high level of agreement to a high level of disagreement with the statement. Discrepancy scores were obtained between his own feelings and the feelings he attributes to his best friends and his teacher. The discrepancy between his own attitudes and those he attributes to significant others in the classroom are the measures of isolation used in this study.

Dissatisfaction. The measurement of dissatisfaction employed in this study is highly related to the isolation measure. After each pupil indicated his degree of agreement with the seven classroom relevant statements (see Isolation Variable above), he was given the following instructions.

> Now go back to item number 1 (Read item). If you are completely satisfied with the way you feel about this, put a check through the number you have circled. If you are not completely satisfied with the way you feel about this draw an arrow from the number you have circled to the number which shows how you would like to feel. Now do this for all of the items on this page.

The sum of the discrepancies between the point used by the pupil in his original marking and the point to which he drew arrows constitutes the self-dissatisfaction measure used in this study. It can be thought to represent a Self-Ideal discrepancy.

Using the above method, discrepancies were computed to obtain peer dissatisfaction and teacher dissatisfaction indices. The peer dissatisfaction index was constructed using the "best friends" items. In this way it is consistent with the peer isolation measure. Teacher dissatisfaction was a combination of the discrepancy index and the sum of the amount of change that the pupil would like to see the teacher make on the following characteristics.

1. Help with work
2. Get angry
3. Make sure work is done
4. Ask us to decide
5. Act friendly
6. Make us behave
7. Trust us on our own
8. Make us work hard
9. Show that he understands how we feel

The pupil could check one of five points on a scale for each item: much more, a little more, the same, a little less, much less than she does now. The sum of the number of scale points away from "the same as she does now" checked by the pupil was combined with the discrepancy index previously mentioned to constitute the teacher dissatisfaction measure.

Pupil Academic Performance

Utilization of Abilities. Each class is split at the median into a high intelligence group and low intelligence group by scores from standard intelligence tests. The teacher then divides each of these groups into high achieving and low achieving sub-groups. Thus, the class is divided into four ability-achievement groups; high ability-high achievement, high ability-low achievement, low ability-high achievement, and low ability-low achievement. The two high achieving groups are considered to be utilizing their abilities more completely and are designated as the "high utilizers," while the two low achieving groups are considered to be "low utilizers." This ability-achievement measure, as indicated by the way each class was divided, represented the pupil's relative position in his class, not his ability or achievment in relation to all pupils of a particular age or grade. A comparison of the mean I.Q. scores yields no differences for these two groups of utilizers. I.Q. mean for the "high utilizers," for instance, is 109.38, while that of the "low utilizers" is 109.00.

According to the theoretical scheme developed in Chapter II, a pupil's feelings about school and self as well as his performance in the classroom are influenced largely by three contexts of social relations: a) characteristics of the pupil's family and his parents' attitudes toward school, b) the pupil's status and relations with his peers, and c) factors associated with the teacher and teacher behavior. Chapters IV, V, VI, and VII of this report focus on the empirical findings uncovered during the course of this study in each of these three areas. Chapter IV deals with the general area of parental influences on pupils' attitudes and performances in the classroom. In particular, this part of the research focuses on some correlates of pupil perceptions of parental attitudes toward school.

Chapter IV

PUPIL PERCEPTIONS OF PARENTAL ATTITUDES TOWARD SCHOOL*

Each of the hypotheses tested in this part of the chapter involves pupils' perceptions of their parents' attitudes toward school. These perceptions are viewed as pivotal processes between family characteristics and the pupil's attitudes and performance.

Family Characteristics. The clearest difference found in this part of the study is associated with the parents' educational level. As shown in Table 7, parents who are seen as supportive of school by their children have more formal education than those who are seen as indifferent or nonsupportive ($p < .01$ for fathers and $p < .005$ for mothers). Among the highly supportive fathers, 39% were college graduates, many with additional graduate work. Among the nonsupportive fathers, only 23% had this degree of educational attainment. In contrast to this, among the fathers who failed to finish high school, 37% were seen as not supportive, and 27% as supportive. Looking at the most educated fathers as a group, 55% were seen as highly supportive and only 16% as not supportive.

The results are even more significant in relation to mothers. Among the highly supportive mothers, 32% were college graduates and 17% had not completed high school. Among the nonsupportive mothers, on the other hand, 34% had not completed high school and only 21% had graduated from college. Looking at the most educated mothers as a group, 61% of them were seen by their children as highly supportive of school, and only 11% seen as nonsupportive.

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*Margaret Barron Luszki and Richard Schmuck primarily are responsible for the contents of Chapter 4. More detailed information can be found in an unpublished paper of the same title by Drs. Luszki and Schmuck.

TABLE 7

PUPIL PERCEIVED PARENTAL SUPPORT AND PARENTAL EDUCATION

Education	Parent	Perceived Parental Support Per Cent (and Frequency) Highly Supportive	Neutral	Not Supportive
College and/or Graduate Studies	Father	39% (95)	27% (49)	23% (27)
	Mother	32% (95)	24% (44)	21% (17)
High School and/or Some College	Father	34% (81)	41% (75)	40% (48)
	Mother	51% (153)	57% (106)	45% (37)
Grade School and/or Some High School	Father	27% (64)	32% (59)	37% (44)
	Mother	17% (49)	19% (36)	34% (28)

Chi Square (FATHER) = 13.86 (.01 > p > .005)

Chi Square (MOTHER) = 16.51 (.005 > p > .001)

A finding relevant to the higher significance of mother's education for pupil perceived support is that mothers are thought of by their children as being more important than fathers ($p < .001$). More than half the pupils rank their mother as being the most important person in their lives, while only about 18 per cent of the pupils rank their fathers as most important.

Despite the clear association between a pupil's perception of his parent's interest in school and that parent's educational level, no statistically significant relationship was found in our sample between the father's occupational status and the pupil's perception of his parents' interest in school. There is, however, a trend suggesting that parents in the upper-middle class tend to be more supportive of school

than parents in the upper-middle and working occupational categories. The data show that 58 per cent of the upper-middle class parents are viewed as being highly supportive of school, while only 47 per cent and 48 per cent of the parents in the lower-middle and working classes respectively are perceived as highly supportive. On the other extreme, the data also indicate a tendency for the lower-middle and working class parents to be more nonsupportive than the upper-middle class parents.

Further, children of mothers who work full time are likely to see their mothers as less supportive than do other children. The data in Table 8 support this generalization ($p < .01$). The difference is highlighted in the findings for mothers who are seen as nonsupportive. Twenty-two per cent of the working mothers compared to 12% of the nonworking mothers are viewed by their children as nonsupportive of school. The social status of these working mothers tends on the whole not to differ from that of other women in the sample and does not account for this result. These results, in summary, indicate that maternal education and employment, though not father's occupation, are associated with the child's perceptions of parental attitudes toward school.

Pupil Age and Sex. Age and sex have been shown to have a bearing on children's parental perceptions. Kohn and Fieldler (1961) for example, reported that younger pupils differentiate less than older pupils, and females are somewhat more positive than males in their perceptions of others. Kagan (1956) and associates (Kagan and Lemkin, 1960; Kagan, Hoskin and Watson, 1961) have made rather extensive studies of children's perceptions of parental attributes. None of the attributes studied was related directly to attitudes toward school, but the results showed that boys view their parents somewhat differently from girls.

Table 8

PUPIL PERCEIVED MATERNAL SUPPORT AND MOTHERS' EMPLOYMENT

Mothers' Employment	Perceived Maternal Support Per Cent (and Frequency)		
	Highly Supportive	Neutral	Not Supportive
Less than half time or half time	55% (279)	33% (170)	12% (64)
More than half time or full	50% (88)	28% (48)	22% (39)

Chi Square = 10.1 ($.01 > p > .005$)

Our data indicate that younger pupils perceive their parents as supporting academic striving more than older pupils. There is clearly an inverse relationship between a pupil s age and his perception of positive parental support of school ($p < .005$). Table 9 shows that over 56 per cent of the elementary level pupils in the sample indicate very positive parental support of school, while only 38 per cent of the senior high school pupils indicate such support. In both the neutral and the nonsupportive categories, on the other hand, there is an increasing percentage as one ascends the educational ladder.

Chi square analysis of the data indicates that sex of pupil and strength of perceived parental support of school are not related.

Types of Perceived Parental Support of School. The data reported above all relate to quantitative aspects, or the strength of perceived parental support. Some differences were found also on the qualitative side. Three

TABLE 9

PUPIL PERCEIVED PARENTAL SUPPORT AND PUPIL AGE

Pupil Age Level	Perceived Parental Support Per Cent (and Frequency)		
	Highly Supportive	Neutral	Not Supportive
Elementary	56% (236)	33% (137)	11% (45)
Junior High	46% (64)	41% (57)	13% (19)
Senior High	38% (59)	45% (69)	17% (27)

Chi Square = 17.27 (.005 > p > .001)

general types of pupil perceptions of parental attitudes toward school can be isolated: a) affective support and approval, e.g., "is proud of me," "thinks I'm doing well," "is pleased with my school work"; b) offer of help and active support, e.g., "wants to help me," "asks questions and tries to help me," "wants to know and help," and c) emphasis on academic achievement, e.g., "wants me to do my very best," "wants me to learn more," "wants me to stay in school and get a diploma."

In an analysis of these data, four major findings emerged.

1. Mothers and fathers do not differ significantly in the type of support the pupils view each as offering.

2. Lower-middle class pupils, both boys and girls, perceive more affective support and approval from both parents than upper-middle and working class pupils.

3. Upper-middle class pupils, primarily girls, perceive more parental helping and active support than working class pupils, who in turn, perceive more than lower-middle class pupils.

4. Boys perceive more parental academic achievement pressure than girls. Furthermore, boys in the working and lower-middle classes perceive more parental achievement pressure than boys in the upper-middle class.

Pupil Attitudes and Performance The data generally indicate that pupils who view their parents as actively interested and supportive of what they are doing in school make a more positive psychological adjustment to school than pupils who see their parents as less supportive. First, pupils who perceive their parents as holding supportive attitudes toward their school life feel more positive about themselves than pupils who perceive less parental support. Indices for parental support of school and self-esteem (Table 10) show that pupils who view their parents as supporting school have more positive self-feelings than pupils who view less parental support of school ($p < .005$).

TABLE 10

PUPIL PERCEIVED PARENTAL SUPPORT AND ATTITUDE TOWARD SELF

Attitude Toward Self	Perceived Parental Support Per Cent (and Frequency)		
	Highly Supportive	Neutral	Not Supportive
Positive	41% (148)	32% (85)	23% (20)
Neutral	35% (125)	36% (93)	34% (29)
Negative	24% (86)	32% (85)	43% (37)
Chi Square = 17.50 ($.005 > p > .001$)			

Secondly, pupils who perceive their parents as holding supportive attitudes toward their school life feel more positive about school than pupils who perceive less parental support. The data in Table 11 confirm this statement ($p < .001$). Seventy-seven per cent of the pupils perceiving very high parental support have positive attitudes toward school, whereas only six per cent of the pupils with high supportive parents have negative attutudes toward school. When the pupils with positive attitudes toward school are viewed as a group, it will be seen that 57% see their parents as highly supportive, whereas only nine per cent see their parents as nonsupportive.

TABLE 11

PUPIL PERCEIVED PARENTAL SUPPORT AND ATTITUDE TOWARD SCHOOL

Attitude Toward School	Perceived Parental Support Per Cent (and Frequency)		
	Highly Supportive	Neutral	Not Supportive
Positive	77% (274)	66% (173)	51% (46)
Neutral	17% (61)	24% (64)	27% (24)
Negative	6% (22)	10% (26)	22% (20)

Chi Square = 32.38 ($p < .001$)

Finally, pupils who perceive their parents as holding supportive attitudes toward their school life utilize their abilities more completely than pupils who perceive less parental support. The data in Table 12 confirm this statement for elementary pupils ($p < .025$) and for junior high

TABLE 12

PUPIL PERCEIVED PARENTAL SUPPORT AND UTILIZATION OF ABILITIES AT THREE AGE LEVELS

Perceived Parental Support	Per Cent (and Frequency) of High and Low Utilizers at Each Age Level	
	ELEMENTARY	
	High	Low
Supportive	53% (154)	47% (135)
Nonsupportive	38% (27)	62% (44)
Chi Square = 5.31 $p < .025$		
	JUNIOR HIGH	
	High	Low
Supportive	51% (48)	49% (46)
Nonsupportive	30% (10)	70% (23)
Chi Square = 4.24 $p < .05$		
	SENIOR HIGH	
	High	Low
Supportive	51% (46)	49% (44)
Nonsupportive	41% (16)	59% (23)
Chi Square = 1.11 N.S.		

school pupils ($p < .05$), but not for those in tenth through twelfth grades. Generally speaking, the younger the pupil, the more impact his perception of parental support of school has on his academic performance. This finding is consistent with those of Coleman (1961) and others which show the greater impact of the peer group and reduced influence of the parents during adolescence. About 53% of the elementary pupils with very supportive parents are utilizing their abilities quite adequately. Overy 62% of those elementary pupils with nonsupportive parents, on the other hand, are utilizing their abilities at a low level. In the junior high, 70% of those pupils who perceive their parents as nonsupportive or school are low utilizers. There is some trend for this to be the case in senior high also, but the chi square analysis does not reach a high enough level to be significant. Nevertheless, 59% of senior high pupils who perceive their parents as not supporting the academic are under utilizing their abilities. Since the high and low utilizers in the sample were equal in intelligence, these results point to the important associations between a) a pupil's perception of his parents' support of school life and b) a pupil's attitudes toward self and school as well as his academic achievement.

Perhaps some examples taken from our data will help make these findings more concrete. Consider, for instance, this fourth grade boy who sees his parents as unsupportive of school. When presented with the incomplete sentenece, "When I talk about school, my father," he answers "doesn't like it." For his mother, he writes "Says I am doing bad." He has an I.Q. of about 106 which is rather high according to the ability range of this particular class. However, his teacher says he is achieving at quite a low level. Furthermore, he manifests a very negative attitude toward himself and rather negative feelings toward school. He filled out

the self items in the following ways: "Sometimes I think I am ours." "When I look at other boys and girls and then look at myself I feel like a smart aleck." "When I look in the mirror, I see a bad boy." On another self-related incomplete sentence, he writes "When I am by myself I feel stupid."

On some of the incomplete sentences for assessing his attitudes toward school, he answers: "My schoolwork is hard." "Studying is not easy." "Homework is stupid." "Learning out of books is dum (sic)."

This boy has a few friends his own age, but by and large he appears to be isolated from his peers. His life as a pupil is not a happy one. His teacher sees him as a boy who is generally uninterested in school. She adds that sometimes he tries hard, but he is not able to concentrate for long periods.

Let us contrast him with another fourth grade boy who is achieving very highly considering his intelligence level. He has about as many close friends as his classmate described above but shows a much different pattern of perceived parental support for school and attitudes toward school. This boy writes: "When I talk about school my father likes to know what I have done in school," and ". . . my mother listens very carefully." On another item he writes "A father is nice when I talk about school," indicating again his perception that his father is very supportive of him as a pupil.

In revealing his attitudes toward school, he answers: "Studying is fun," "Homework is fun when it is easy." "This school is nice." He also views his teacher as reflecting general satisfaction with his behavior as a pupil. He writes, "My teacher thinks I am nice most of the time."

Consider a third pupil, this one a fifth grade girl, who perceives her parents as being very supportive of her academic behavior. She answers, "When I talk about school, my father likes me to talk about school," and ". . . .my mother wants to know about it." She has an I.Q. of 100 which is low according to the ability range of this particular class. However, she is achieving at quite a high level. Furthermore, her score on the self-esteem index is very positive. She filled out the self items as follows: "Sometimes I think I am pretty good." "When I look at other boys and girls and then look at myself, I feel that I like me and the others." "When I look in the mirror, I feel that I look OK." About school she writes, "This school is nice," and she says, "Studying is fun most of the time."

Finally, contrast this pupil with a fifth grade girl who views her parents as being very unsupportive of school. About her father she writes, "When I talk about school, my father gets mad," and ". . . .my mother says how many bad things do you do in school?" Even though her I.Q. score is average for her class, she is achieving at a very low level. Her attitude toward self appears very negative as indicated in the following responses: "Sometimes I think I am really dumb." "When I look at other boys and girls and then look at myself, I feel that they are more pretty and smart." "When I look in the mirror, I think how I can change myself."

Sociometric Status in the Peer Group. The results generally indicate that sociometric status in the peer group and perceived parental support of school are unrelated, but, when taken together, are powerful predictors of a pupil's classroom performance.

The data in Table 13 indicate that at three levels of perceived parental support, very supportive, moderately supportive, and nonsupportive,

TABLE 13

PUPIL PERCEIVED PARENTAL SUPPORT, SOCIOMETRIC STATUS IN THE PEER GROUP, AND UTILIZATION OF ABILITIES

Perceived Support	Sociometric Status	Per Cent (and Frequency) of High and Low Utilizers	
		High	Low
High	High	65% (87)	35% (47)
	Medium	53% (82)	47% (72)
	Low	37% (26)	63% (44)
		Chi Square = 14.47 ($p < .001$)	
Neutral	High	62% (54)	38% (33)
	Medium	46% (53)	54% (63)
	Low	40% (24)	60% (36)
		Chi Square = 8.32 ($p < .02$)	
None	High	48% (11)	52% (12)
	Medium	20% (8)	80% (32)
	Low	26% (7)	74% (20)
		Chi Square = 5.67 ($.05 \leq p \leq .10$)	

sociometric liking status in the peer group is positively associated with utilization of abilities. In the very supportive condition, for instance, 65 per cent of the pupils with high liking status are high utilizers, 53 per cent with medium liking status are high utilizers, and only 37 per cent with low liking status are high utilizers ($p < .001$). Conversely, pupils with moderate parental support and low sociometric position are utilizing their abilities at a low level in 60 per cent of the cases; less than 54 per cent of the pupils with moderate home support and medium peer group status are low utilizers, while only 38 per cent of the pupils with moderate parental support and high peer group status are low utilizers. Finally, it appears that even in the nonsupportive home conditions, there is a trend, though not significant, for pupils with high liking status in the peer group to be higher utilizers of their abilities than those with lower status ($p < .10$). The results suggest that peer support may serve as a substitute source of personal gratification, especially as the pupil grows older.

IMPLICATIONS FOR TEACHERS

The research reported above shows how important it is for children to feel that their parents are interested in and supportive of their school life. Such feelings are associated with favorable school achievement, positive attitudes toward school, and a healthy level of self-esteem. If this is true, administrators and teachers should try to increase every pupil's chance to obtain parental support by attempting actively to educate parents in the significant role they play in the life of a child in school.

The problem of working with parents is a complex one, beyond the scope of this research. The following ideas, however, suggest a few things

that might be done. First is the job of obtaining information about the home. Some states have records of pertinent home information about each pupil which are easily accessible to the teacher. A teacher may want to secure additional information. Some teachers, in the context of getting acquainted with a new class, ask pupils to fill out questionnaires covering family background information. Sentence completion stems such as those used in this research are also useful. Other teachers make home visits after a conference with one of the parents to get a better idea of the home life of the pupil. Whatever information gathering and diagnostic techniques are employed, it is important for the teacher to get some valid idea early in the year about the state of affairs in each of her pupils' homes.

If the information about a home suggests that some changes are desirable, the teacher may be able to establish a positive enough relationship with the parents so that through conferences and visits she will be able to help them assume more supportive roles in relation to their child's school life. Through meetings with groups of parents, too, teachers can engage parents in discussions of how they treat their children in relation to school, make suggestions about alternative actions, and gain some commitment to action by setting up a later date for evaluation and discussion. A teacher might, for instance, attempt to enhance parental support by discussing individual differences. An understanding of differences among pupils relative to sex, cultural background, abilities, and interests increases the opportunity for parents to be more accepting and tolerant of their children. In addition to producing greater acceptance of their own child as a pupil, a family standard of acceptance of differences may emerge from trying out new ways of relating to the child.

Approaches such as these have proved successful in changing behavior and attitudes. Teachers often find parents eager for information and guidance because their lack of support stems primarily from their failure to understand child behavior. In some parents, however, negative feelings toward the child and toward school are deep rooted and even a highly skilled teacher may be unable to enlist cooperation. Perhaps such parents should be referred to a visiting teacher who could try to understand and alleviate the nonsupportive attitudes. In such work both teacher and visiting teacher must be careful not to put further pressures and strains on what may be already a difficult home situation.

The finding that the parents who are less supportive of their children's school life have less education on the whole than the more supportive parents suggests that at times the problem is one which spans the generations. In some parents the mere mention of school brings out their own feelings of frustration and failure and the personal threat aroused by any approach from the teacher may be so strong that little can be done to gain their cooperation. Other parents may lack the skill needed to communicate an attitude of support for either the educational institution or their child's academic efforts. Children in such families are suffering because their parents have not received adequate preparation for the complex task of child rearing in an increasingly industrialized society. Family life education on a large scale is needed. Parent teacher conferences alone cannot supply the background necessary to understand child behavior. Programs of family life and child development education must become more easily available to parents and mental health consultants and social workers should be more accessible for parent consultation. Sometimes family counseling is in order, especially where pupil maladjustment in school is symptomatic of family strains and conflicts.

Despite the relationship between parental attitudes and pupil school adjustment, there are many pupils who do not follow this pattern: pupils who like school and do well in school despite lack of support at home for their school endeavors. Many such cases can be attributed to positive child teacher relationships. The teacher's own feelings about and behaviors toward individual pupils can go a long way toward making school a place where security and respect are found. Thus, it is possible that a child's desire for personal worth, though threatened by nonsupportive parents, may find some opportunity for fulfillment in the classroom. The teacher also can help the child achieve some insight into the behavior of his parents. Informally, in her day-to-day relations with pupils, and formally through the social science curriculum, the teacher can stimulate pupils to think about the reasons for behavior in general and parental behavior in particular. Through human relations skills gained in the classroom, the pupil can be helped to handle his own family situation better.

SUMMARY

This part of the study substantiates the general proposition that family characteristics and living styles are related to a child's perception of his parents' attitudes toward school. Specifically, parents who are seen as supportive of school life have more formal education than those who are indifferent or nonsupportive. Also, children of mothers who work full time see their mothers as less supportive than do other children. Younger pupils view their parents as supporting their school life more than older pupils.

Three types of pupil perceptions of parental attitudes toward school are isolated: a) affective support and approval, b) help and active support, and c) academic achievement pressure. These three types of perceived support are differentially related to the familial social class and sex of the pupils.

This research shows further that pupils who perceive their parents as holding supportive attitudes toward their school life utilize their abilities more fully and make a more positive psychological adjustment to school than pupils who perceive less parental support. Indices for parental support of school, self-esteem, and attitude toward school show that pupils who view their parents as supporting school have higher self-esteem and more positive attitudes toward school than pupils who view less parental support of school. Finally, sociometric status in the peer group and pupil perception of parental support of school, taken together, predict better to a pupil's utilization of his abilities than one of these alone.

Chapter IV concludes with some suggestions for teachers.

CHAPTER V

SOME RELATIONSHIPS OF PEER RELATIONS IN THE CLASSROOM TO PUPIL ATTITUDES AND PERFORMANCE*

Most of the data reported in Chapter V are derived from upper elementary classrooms. When appropriate, however, the generalizability of these findings to other developmental levels will be mentioned. The first and last findings are based on the full sample of twenty-seven classrooms.

The first finding is that classroom peer groups distinguished by more liking diffuseness exhibit more positive group affect than groups with more centrality. Indeed, a rank order correlation of rho= -.33 ($p < .05$) indicates a negative association between the centrality of liking "choice" scores and group affect. As predicted, group affect decreases as a narrow focus of liking choices increases. Further, a correlation of rho = -.26 ($p < .10$) indicates a probable negative association between the centrality of liking "rejection" scores and group affect. These correlations, though small, indicate at least a tendency for peer groups with diffuse liking structures to have more supportive social-emotional atmospheres.

Table 14 shows that pupils are more accurate when estimating their actual liking status in the peer group, the more liking choices are centrally structured in the group. These data indicate a positive

*Richard Schmuck primarily is responsible for the contents of Chapter V. More detailed information can be found in Dr. Schmuck's doctoral dissertation, Social-Emotional Characteristics of Classroom Peer Groups, University of Michigan, 1962; and his "Some Relationships of Peer Liking Patterns in the Classroom to Pupil Attitudes and Achievement," in School Review, Autumn, 1963.

association between structural centrality and accuracy of personal status in the peer group. The results show, moreover, that as the liking dimension approaches a more narrowly focused distribution, bimodal centrality, more pupils accurately estimate their status in the peer group. These results were also substantiated for high school classrooms ($X^2 = 15.51$, df = 2, $p < .001$).

TABLE 14

LIKING STRUCTURAL TYPES AND PUPIL ACCURACY IN ESTIMATING STATUS

Liking Structural Type	Per Cent (and frequency) of Accurate And Inaccurate Pupils for Each Structural Type	
	Accurate	Inaccurate
Bimodal Centrality	66% (97)	34% (51)
Mono-modal Centrality*	64% (83)	36% (46)
Diffuseness	51% (75)	49% (72)
Chi square = 7.85 ($p < .02$)		

*Includes either "choice" or "rejection" centrality.

A more refined analysis of the data further substantiates this relationship between centrality and accuracy. Table 15 indicates that pupils who have low actual liking status in elementary peer groups tend to perceive their low status more accurately in the centrally structured situations. On the other hand, in the diffusely structured classrooms about 60 per cent of those pupils with low actual status perceive themselves as being highly liked in the group. We contend that the profusion

of emotional support for individuals in the diffusely structured peer group accounts for this condition. Similar results were obtained for a combined analysis of the junior and senior high age levels ($\chi^2 = 9.95$ df = 2, $p < .01$).

TABLE 15

PUPIL ACCURACY IN COGNIZING LOW STATUS IN THREE LIKING STRUCTURES

Liking Structural Type	Per Cent (and frequency) of Accurate And Inaccurate Pupils for Each Structural Type	
	Accurate	Inaccurate
Bimodal Centrality	58% (44)	42% (32)
Mono-modal Centrality	45% (29)	55% (35)
Diffuseness	40% (29)	60% (44)
Chi square = 14.65 ($p < .001$)		

Some ramifications of having low liking status and knowing it become evident in further analyses. The data shown in Table 16 show two things; first that pupils with low actual liking status are lower utilizers of their abilities than pupils with higher actual liking status and second that pupils who perceive themselves as holding low liking status are lower utilizers of their abilities than pupils with higher perceived status.

Furthermore, an inspection of the percentages in Table 16 shows that pupils who perceive themselves as being liked, though they have low actual liking status, are utilizing their abilities more highly than those

TABLE 16*

ACTUAL LIKING STATUS, COGNIZED LIKING STATUS AND UTILIZATION OF ABILITIES

Actual Liking Status and Cognized Liking Status		Per Cent (and frequency) of High and Low Utilizers in Each Liking Category			
Actual Status	Cognized Status	High	Low	Totals Cognized Status	Totals Actual Status
High	High	65% (100)	35% (53)	(153)	(211)
	Low	43% (25)	57% (33)	(58)	
Low	High	48% (53)	52% (58)	(111)	(213)
	Low	31% (32)	69% (70)	(102)	
	Totals Utilization	(210)	(214)		

Chi square (Actual Status - Cognized Status) = 18.77 ($p < .001$)
Chi square (Actual Status - Utilization = 15.85 ($p < .001$)
Chi square (Cognized Status - Utilization) = 19.87 ($p < .001$)
Chi square (Interaction) = .02 (NS)
Chi square (Actual Status - Cognized Status - Utilization) = 54.51 ($p < .001$)

*The Chi square partitioning statistic used in Tables 16, 17, and 18 is explained by William Hays in notes from his statistics course entitled, "Analyses of Qualitative Data," University of Michigan, Spring, 1955, pages 24-33.

who have low status and know it. Results for older pupils are essentially the same. These results emphasize the importance of introducing perceived status into studies relating sociometric status to performance.

Further analyses of our data emphasize the importance of considering perceived liking status along with actual status in studies of classroom peer groups. The results in Tables 17 and 18 show that pupils

who perceive themselves as holding low liking status have more negative attitudes toward self and school than pupils with higher perceived status.

TABLE 17

ACTUAL LIKING STATUS, COGNIZED LIKING STATUS AND ATTITUDE TOWARD SELF

Actual Liking Status and Cognized Liking Status		Per Cent (and frequency) of Those with Postive and Negative Attitude Toward Self in Each Liking Category			
Actual Status	Cognized Status	Positive	Negative	Totals Cognized Status	Totals Actual Status
High	High	60% (90)	40% (61)	(151)	(211)
	Low	40% (24)	60% (36)	(60)	
Low	High	58% (63)	42% (46)	(109)	(210)
	Low	35% (35)	65% (66)	(101)	
	Totals Attitude Toward Self	(212)	(209)		

Chi square (Actual Status - Cognized Status) = 17.22 ($p < .001$)
Chi square (Actual Status - Attitude Toward Self) = 2.28 (NS)
Chi square (Cognized Status - Attitude Toward Self) = 19.60 ($p < .001$)
Chi square (Interaction) = .57 (NS)
Chi square (Actual Status - Cognized Status - Attitude Toward Self) = 39.67 ($p < .001$)

The results in Tables 17 and 18 show that perceived liking status is related positively and significantly to both attitude toward self and attitude toward school, while actual liking status shows no such relation to these variables.

Thus, one could be mislead if he were to conclude from previous studies that peer group sociometric relations are not related to pupil

TABLE 18

ACTUAL LIKING STATUS, COGNIZED LIKING STATUS, AND ATTITUDE TOWARD SCHOOL

Actual Liking Status and Cognized Liking Status		Per Cent (and frequency) of Those with Positive and Negative Attitude Toward School in Each Liking Category			
Actual Status	Cognized Status	Positive	Negative	Totals Cognized Status	Totals Actual Status
High	High	54% (82)	46% (69)	(151)	(211)
	Low	40% (24)	60% (36)	(60)	
Low	High	56% (62)	44% (48)	(110)	(211)
	Low	38% (38)	62% (63)	(101)	
Totals Attitude Toward School		(206)	(216)		

Chi square (Actual Status - Cognized Status) = 16.88 ($p < .001$)
Chi square (Actual Status - Attitude Toward School) = .34 (NS)
Chi square (Cognized Status - Attitude Toward School) = 11.06 ($p < .001$)
Chi square (Interaction) = .56 (NS)
Chi square (Actual Status - Cognized Status - Attitude Toward School) = 28.84 ($p < .001$)

attitudes toward self and school on the basis of an analysis of actual liking status alone. Perceived liking status as well as actual liking status should be analysed together when making a complete social psychological analysis of the classroom peer group. Indeed our data indicate that one important conditioner of attitudes toward self and school is the liking status a child perceives himself as holding in relation to his peers. Presumably, the group structual properties which were highlighted in our results above represent at least one dynamic aspect of this.

In summary, the data so far support the notion that peer group sociometric diffuseness, extensity of interpersonal support for the individual pupil, attitudes toward self and school, and academic productivity, vary together in a systematic fashion. The next few hypotheses involve another significant variable in analysing the impact of peer group liking patterns on individual pupils, pupil potency of involvement in the peer group.

Generally, we predict differential effects on the individual pupil of high or low involvement in his classroom peer group. The general proposition is that peer group status should have a greater impact on those pupils who are highly involved in classroom life, those with few additional alternatives for interpersonal gratifications, than on those pupils lacking such involvement. Results in Tables 19 and 20 indicate that associations exist between actual liking status and one's utilization of abilities, only for pupils with high potency of involvement in the peer group.

Table 19 shows that in the high potency of involvement condition, there is a positive association between actual liking status in the peer group and the utilization of academic abilities. The results presented in Table 20, on the other hand, indicate that this association does not hold for those pupils with low potency of involvement. Thus, it appears that the ability utilization of those pupils most involved in the classroom peer group is more highly associated with actual liking status than is true for those pupils less involved.

Further, the data show that associations exist between actual liking status and attitudes toward self only for pupils with high potency of involvement in the peer group. A comparison of the chi square analyses

TABLE 19

ACTUAL LIKING STATUS AND UTILIZATION WITH HIGH POTENCY OF INVOLVEMENT

Liking Status	Per Cent (and frequency) of High and Low Utilizers	
	High	Low
High	65% (73)	45% (47)
Low	35% (39)	55% (58)
Chi square = 9.14 (p < .005)		

TABLE 20

ACTUAL LIKING STATUS AND UTILIZATION WITH LOW POTENCY OF INVOLVEMENT

Liking Status	Per Cent (and frequency) of High and Low Utilizers	
	High	Low
High	49% (48)	40% (44)
Low	51% (50)	60% (67)
Chi square = 1.84 (NS)		

in Tables 21 and 22 does confirm the proposition that actual liking status is associated more highly with attitude toward self for pupils highly involved in the peer group than for those with less involvement.

TABLE 21

ACTUAL LIKING STATUS AND ATTITUDE TOWARD SELF WITH HIGH POTENCY OF INVOLVEMENT

Liking Status	Per Cent (and frequency) Of Those With Positive And Negative Attitude Toward Self	
	Positive	Negative
High	61% (65)	46% (53)
Low	39% (42)	54% (62)
Chi Square = 4.78 (p < .05)		

TABLE 22

ACTUAL LIKING STATUS AND ATTITUDE TOWARD SELF WITH LOW POTENCY OF INVOLVEMENT

	Per Cent (and frequency) Of Those With Positive And Negative Attitude Toward Self	
	Positive	Negative
High	44% (46)	45% (46)
Low	56% (59)	55% (57)
Chi square = .02 (NS)		

Finally, the data indicate that the attitude toward self of pupils with high potency of involvement in the peer group is more positive as peer group structure increases in diffuseness. The data in Table 23 show that the "self esteem" of pupils with high potency of involvement in the classroom group is higher as group structure increases in diffuseness.

TABLE 23

ATTITUDE TOWARD SELF OF PUPILS HIGHLY INVOLVED IN THE PEER GROUP FOR THREE LIKING STRUCTURES

Liking Structural Type	Per Cent (and frequency) of Those With Positive and Negative Attitude Toward Self in Each Liking Structure	
	Positive	Negative
Bimodal Centrality	41% (56)	59% (82)
Mono-modal Centrality	46% (67)	54% (79)
Diffuseness	58% (50)	42% (36)

Chi square = 6.63 ($p < .05$)

In summary, the data so far point out, among other things, that peer groups characterized by a wide spread of liking relations among members have more positive emotional climates; that peer group liking structure and pupil involvement in the group help to fashion a pupil's perception of himself in relation to the peer group; that this perception of self in relation to others is associated with a pupil's attitudes toward self and school; and that a pupil's perception of his place in the peer group is related also to his utilization of abilities.

IMPLICATIONS FOR TEACHERS

This part of our research also has direct relevance for teaching. The findings emphasize the importance of positive emotional climate for an individual's cognitions of himself and for effective academic learning. Our data indicate that when the peer group pattern of interpersonal affection is diffuse, so that many pupils receive at least a few liking choices, pupils tend to be more highly attracted to the classroom setting and to utilize their academic potentials more completely. If, as these findings indicate, successful human relations are important conditions for academic achievement, the teacher should try to enhance every pupil's ability to obtain emotional support from his peers by actively attempting to alter peer group sociometric arrangements. He should attempt to do this not only because good human relations is a value in itself, but also because it contributes importantly to the school's academic goals.

What do findings of this type suggest for teacher behavior? First is the job of obtaining accurate information concerning the distribution of liking choices in the classroom. One way of accomplishing this is through careful and systematic observation. The teacher might ask himself: Are there some pupils who tend to be left out of most classroom activities? Are some pupils always chosen first and others always last? He should raise questions such as these in attempting to view the peer group as objectively as possible. He might also examine his own behavior and attitudes: How do I distribute rewards and punishments in the classroom? Are there certain children to whom I give primarily negative criticism and rebuke, and others who receive a large portion of the praise. In addition to careful observation and self-questioning, the teacher might employ sociometric techniques such as those used in the

research reported here in order to find out how interpersonal affect is distributed in his group.

Once the classroom distribution of affect is clear to the teacher, and if some change is desired, he may try various techniques to modify the peer group structure and thus develop more positive feelings among the pupils. A cooperative study group, for instance, in which low and high sociometric status pupils work together for the achievement of some common goal, is quite often effective in changing inaccurate perceptions and stereotypes about low status children. Another possibility is to work low status children gradually into roles which are viewed as having considerable prestige by the peer group.

Teachers might enhance the affective climate of the classroom by including information and discussion about the nature of individual differences as a part of the subject matter. An understanding of differences among pupils relative to family background, sex, race, abilities, and interests increases the opportunity for pupils to be more accepting and tolerant of a greater number of their peers. In addition to producing greater acceptance of individual pupils, a classroom standard of acceptance of differences may emerge from such explorations.

Another possible way of developing a wider focus of acceptance in the peer group is through classroom programs directed toward a greater understanding of behavioral causation, or the "why's" of human behavior. The assumption behind this type of academic content is that greater insight into those factors which contribute to a pupil's actions will result in a more accepting classroom atmosphere.

The teacher's own feelings about and behaviors toward individual pupils can also contribute to a pupil's acceptance by his peers. If the teacher accepts each pupil as an individual, understanding his limitations and giving him the kind of support required to expand his assets and help overcome his shortcomings, members of the class will tend to follow a similar pattern. As a result, it is more likely that a climate of mutual support in the classroom will develop. But if the teacher supports primarily the high achievers and shows rejecting or disapproving behavior to those who are not so successful in learning tasks, a competitive, non supportive climate is likely to emerge.

The teacher can give classroom relevant rewards directly by making positive comments about the pupil's performance or indirectly by organizing learning experiences in a manner which will maximize success and reduce failure. In this way, too, he creates the anticipation of future rewards. With more experiences of success, a pupil's self esteem should be enhanced, and concurrently his perception of the school environment should tend to become more positive.

Each of these implications for teacher action is derived from our concepts and findings. Since our data indicate the importance of supportive peer group relations for pupil self-esteem, attraction to school tasks, and the utilization of abilities, we deem it important for teachers to attend to some of these suggestions. Of course, more research evaluating various techniques for working with the classroom peer group definitely is needed also. Along these lines, we hope that social psychologists will become increasingly more involved in describing and explaining classroom phenomena.

CHAPTER VI

SOME RELATIONSHIPS OF TEACHER AS SOCIAL-EMOTIONAL AFFILIATE TO PUPIL ATTITUDES AND PERFORMANCE*

All of the data reported in this chapter are derived from elementary, junior high, and senior high classrooms.

The first finding is that the more a teacher likes a particular pupil, the less isolated he is from the teacher. Isolation here is defined as the assignment by the pupil of a low reward value to attitudes which he sees the teacher highly valuing. Table 24 shows the results.

TABLE 24

NUMBER OF PUPILS ISOLATED FROM THE TEACHER AND THEIR DEGREE OF BEING LIKED BY THE TEACHER

Isolation from Teacher	Being Liked by Teacher: Low	High
High	57% (185)	43% (142)
Low	44% (151)	56% (193)
	X^2 = 11.25 P = .001	

Further analysis indicates that isolation from the teacher is greater when a pupil perceives himself as being disliked by his teacher than when he thinks he is liked by the teacher. Table 25 shows that the more positive a pupil thinks he is evaluated by the teacher, the less isolated he is.

*David Epperson primarily is responsible for the contents of Chapter VI. More detailed information can be found in Dr. Epperson's doctoral dissertation, The Dynamics of Two Variants of Classroom Alienation, University of Michigan, 1962.

TABLE 25

NUMBER OF PUPILS EXPRESSING FEELINGS OF BEING LIKED BY THE TEACHER AND THEIR DEGREE OF ISOLATION FROM HIM

Isolation from Teacher	Feelings of Being Liked (How Teacher sees Pupil)		
	Low	Medium	High
High	24% (79)	40% (132)	36% (121)
Low	14% (50)	38% (142)	48% (175)
	X^2 = 15.02 p = .001		

Other data further substantiate the notion that the influence of the teacher on the feelings of the pupils are very potent. The data in Table 26 show that a high level of isolation from the teacher is accompanied by a high level of dissatisfaction with the teacher.

TABLE 26

NUMBER OF PUPILS ISOLATED FROM THE TEACHER AND THEIR DEGREE OF DISSATISFACTION WITH THE TEACHER

Isolation from Teacher	Dissatisfaction with Teacher	
	High	low
High	65% (200)	35% (110)
Low	37% (132)	63% (225)
	X^2 = 50.34 p = .001	

The data in Table 27 show that a pupil's dissatisfaction with his teacher is also associated with dissatisfaction for himself. Thus isolation from the teacher is associated both with dissatisfaction with the teacher and with dissatisfaction with self (low self-esteem).

TABLE 27

NUMBER OF PUPILS DISSATISFIED WITH THEMSELVES AND THEIR DEGREE OF DISSATISFACTION WITH THE TEACHER

Dissatisfaction with Self	Dissatisfaction with Teacher: High	Low
High	59% (189)	41% (134)
Low	40% (132)	60% (193)
	χ^2 = 20.76 p = .001	

Isolation from the teacher is also related to other attitudes of the pupil. In particular, pupils who are isolated from the teacher have more negative attitudes toward school than those who are not isolated from the teacher. Table 28 shows these results.

Finally our results indicate that pupils who have positive attitudes toward class are higher utilizers of their intelligence than those who are less attracted to the class. The data in Table 29 provide support for the relationship between positive orientation to classroom life and utilization. Those pupils who have high attraction to the classroom are more likely to utilize their academic potentials than pupils with low attraction to the classroom.

TABLE 28

NUMBER OF PUPILS ISOLATED FROM THE TEACHER AND THEIR ATTITUDE TOWARD SCHOOL

Isolation from the Teacher	Attitude toward School	
	Negative	Positive
High	64% (208)	36% (118)
Low	41% (149)	59% (214)
	$X^2 = 35.63$	
	$p = .001$	

TABLE 29

NUMBER OF PUPILS MANIFESTING HIGH AND LOW UTILIZATION AND THEIR ATTITUDE TOWARD SCHOOL

Attitude Toward School	Utilization	
	High	Low
Negative	43% (162	57% (211)
Positive	55% (186)	45% (154)
	$X^2 = 9.05$	
	$p = .01$	

Low attraction to the class is conceptualized as a pivotal variable which mediates between isolation from the teacher and utilization. Even though there is little doubt of the associations that exist

between isolation from the teacher and attraction to class on the one hand, and utilization on the other the dynamics of the relationship between isolation and attitude toward school still remain unclear.

CHAPTER XII

PARENT, PEER, TEACHER AND INDIVIDUAL PUPIL FACTORS IN CREATING CLASSROOM LEARNING ENVIRONMENTS*

The social influences of family, peer group, and teacher on a pupil's utilization of his intelligence are well documented above. Little has been said, however, up to now, about the relative impact of these social factors on boys and girls. Furthermore, no studies have investigated the differential effect for boys and girls separately of each of these influence factors on utilization of intelligence. Are the classroom performances of boys compared with girls, for instance, affected by similar or different sources of social influence? Is the academic achievement of both sexes affected equally by social class and parental attitudes toward school? Are boys and girls influenced to the same degree by peer group rejection or dissatisfaction with the teacher? Questions like these are not answered in current educational research literature. This section is attempting to answer some of these questions, compares boys and girls in a multi-stage analysis of selected social influence correlates of classroom learning.

The mean I.Q. scores for the boys and girls in our sample do not differ. Both the boys and the girls have average intelligence quotients of approximately 109. The two sexes, however, do differ markedly in their academic achievement, and thus differ on how completely they are utilizing their intelligence. The data in Table 30 confirm the general proposition that girls achieve more highly than boys regardless

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* Richard Schmuck and Elmer Van Egmond primarily are responsible for the contents of Chapter XII.

TABLE 30

A COMPARISON OF GIRLS AND BOYS ON THEIR UTILIZATION OF INTELLIGENCE

Utilization Intelligence - Performance		Sex of Pupil Girls	Boys
High	High	111 (63)	65 (36)
	Low	64 (37)	118 (64)
		Chi square = 27.88	p < .001
Low	High	112 (62)	63 (36)
	Low	69 (38)	113 (64)
		Chi square = 24.29	p < .001

of intelligence level. At each ability level, high and low, 63 and 62 per cent respectively of the girls are achieving at a high level, while only 36 per cent of the boys are doing so in each case. Furthermore these achievement discrepancies between girls and boys exist at the three age levels included in the sample, elementary, junior high, and senior high. Separate chi square analyses at each of the three grade levels yield significant and similar results. In this sample of pupils definite achievement differences exist between girls and boys from third grade through senior high school. The similarity of I.Q. scores for the two sexes at all grade levels indicates that these achievement differences are due to factors other than intelligence.

Social Class and Utilization

The data in Table 31 indicate that social class and utilization of intelligence are related positively for girls but not for boys. The

data show that girls in the upper and lower middle classes are utilizing their intellectual abilities at a higher level than working class girls. It appears that the academic achievement pattern for working class girls resembles that of the boys. Indeed, the results indicate that the higher utilizers in the sample for the most part are upper and lower middle class girls while the lower utilizers tend to be the boys of all three social status levels and working class girls.

TABLE 31

THE RELATIONSHIP BETWEEN SOCIAL CLASS AND UTILIZATION FOR GIRLS AND BOYS

Social Class	Utilization			
	Girls		Boys	
	High	Low	High	Low
Upper Middle	61 (74)	21 (26)	35 (43)	46 (57)
Lower Middle	103 (64)	58 (36)	40 (29)	96 (71)
Working	28 (46)	33 (54)	34 (36)	61 (64)
	Chi square = 12.299 $p < .005$		Chi square = 4.296 p = NS	

Perceived Peer Group Status and Utilization

Perceived liking status in the peer group is positively associated with utilization of intelligence for both boys and girls according to the data presented in Table 32. Although fifty-two per cent of the low peer status girls are high utilizers, there is still a definite and significant trend for pupils of both sexes with perceptions of high peer

status to utilize their abilities relatively more highly than those who judge themselves as having low peer status. A comparison of Tables 30 and 32 further bears this out. Whereas around sixty-three per cent of all the girls are high utilizers, only fifty-two per cent of the low peer status girls are utilizing their intellectual abilities at a high level. Likewise, for the boys, some forty-three per cent of the high peer status boys are utilizing their intelligences at high levels, while only about thirty-seven per cent of the total sample of boys are high utilizers.

TABLE 32

THE RELATIONSHIP BETWEEN PERCEIVED PEER GROUP STATUS AND UTILIZATION FOR GIRLS AND BOYS

Perceived Peer Status	Utilization			
	Girls		Boys	
	High	Low	High	Low
High	141 (68)	65 (32)	78 (43)	104 (57)
Low	51 (52)	47 (48)	31 (24)	99 (76)
	Chi square = 7.681 p < .01		Chi Square = 12.057 p < .001	

Satisfaction with Teacher and Utilization

The data in Table 33 indicate that pupil satisfaction with the teacher and utilization of intelligence are positively related for both sexes. Indeed the results for the girls are even more striking than the relationship between peer group status and utilization.

TABLE 33

THE RELATIONSHIP BETWEEN SATISFACTION WITH THE TEACHER AND UTILIZATION FOR GIRLS AND BOYS

Satisfaction With Teacher	Utilization			
	Girls		Boys	
	High	Low	High	Low
High	138 (70)	61 (28)	87 (42)	122 (58)
Low	34 (40)	51 (60)	22 (21)	81 (79)
	Chi square = 27.194 p < .001		Chi square = 12.469 p < .001	

Perceived Parental Support of School and Utilization

Perceived parental support of school and utilization of intelligence are related positively for girls but not for boys. The data presented in Table 34 indicate a difference in utilization for girls in relation to the level of parental support they perceive. A perception of low parental support appears to be particularly disruptive for the school achievement of girls. Like familial social class, perceived support by parents appears to have little effect in differentiating male achievement patterns.

The data presented up to now indicate that the utilization of intelligence by girls is influenced by social class and perceptions of parental, peer, and teacher support. Boy's utilization, on the other hand, is associated only with perceived peer status and satisfaction with the teacher. The home variables of familial social class and perceived parental support of school are not associated with utilization of intelligence for boys.

TABLE 34

THE RELATIONSHIP BETWEEN PERCEIVED PARENTAL SUPPORT OF SCHOOL AND UTILIZATION FOR GIRLS AND BOYS

Parental Support	Utilization			
	Girls		Boys	
	High	Low	High	Low
High	161 (68)	77 (32)	87 (37)	148 (63)
Low	31 (47)	35 (53)	22 (29)	55 (71)
	Chi square = 9.494 p < .005		Chi square = 1.822 p = NS	

Since the variables which are significantly associated with utilization may overlap considerably with one another, the next level of analysis examines the relative effects of each while systematically controlling on the others. For the boys this involves only two variables, perceived peer status and satisfaction with the teacher. In the case of the girls, however, where all four variables are related to utilization, the number of female pupils in the sample will not allow for controlling on three variables while varying the fourth. Efforts will be made to analyze the data as completely as the sample size permits. The boys are considered initially.

Boys

For boys, the data presented above indicate that the two variables, perceived peer group status and satisfaction with the teacher, are both associated with utilization of intelligence. The data summarized in

Table 35, comparing the relative effects of these two factors on utilization, show that for boys who indicate a high degree of satisfaction with teacher there is still a positive association between peer status and utilization. Considering boys with high perceived peer status, the degree of satisfaction with the teacher also is still positively associated with utilization. In a comparison of the relative effects of these two variables on utilization we find that forty-nine per cent of the boys who are high in both satisfaction with teacher and perceived peer status are high utilizers as contrasted to percentages of only twenty-eight, twenty-five, and nineteen high utilizers when they are low in either one or both of these variables. Finally, the data indicate a tendency for satisfaction with the teacher to be more important and impactful for utilization of intelligence in boys than perceived peer group status. In any case, both variables are very important for utilization in boys. Boys who are low on both variables are low utilizers eighty one per cent of the time.

TABLE 35

PEER STATUS AND SATISFACTION WITH THE TEACHER IN RELATION TO UTILIZATION FOR BOYS

Perceived Peer Status	Satisfaction With Teacher	Utilization High	Utilization Low
High	High	67 (49)	71 (51)
	Low	11 (25)	33 (75)
		Chi square = 7.56 p < .01	
Low	High	20 (28)	51 (72)
	Low	11 (19)	48 (81)
		Chi square = 1.61 p = NS	

Girls

In the first level of analysis for the girls, the variables of familial social class, perceived peer group status, satisfaction with the teacher, and perceived parental support of school were all associated with utilization of intelligence. Since social class may be an important conditioning factor for the other variables, our first stage of further analysis for girls will control on the effects of this variable while examining the relationships of the other variables to utilization.

TABLE 36

SOCIAL CLASS AND PEER GROUP STATUS IN RELATION TO UTILIZATION FOR GIRLS

Familial Social Class	Perceived Peer Status	Utilization High	Utilization Low
Upper Middle	High	49 (77)	15 (23)
	Low	12 (67)	6 (33)
		Chi Square = .722 p = NS	
Lower Middle	High	71 (70)	30 (30)
	Low	32 (53)	28 (47)
		Chi square = 4.70 p < .05	
Working	High	21 (51)	20 (49)
	Low	7 (35)	13 (65)
		Chi Square = 1.42 p = NS	

The relationships between perceived peer status and utilization at three social status levels are summarized in Table 36. These data indicate that perceived peer status and utilization are associated only in the case of girls designated as lower middle class. Although there are tendencies for this relationship to hold for working class girls as well, the data do not show a significant association. Thus, perceiving oneself as having low peer status appears to influence the achievement of lower middle class girls more than it does that of the upper middle and working class girls.

TABLE 37

SOCIAL CLASS AND SATISFACTION WITH THE TEACHER IN RELATION TO UTILIZATION FOR GIRLS

Familial Social Class	Satisfaction With Teacher	Utilization	
		High	Low
Upper Middle	High	53 (79)	14 (21)
	Low	8 (53)	7 (47)
		Chi square = 4.27 p < .05	
Lower Middle	High	31 (75)	27 (25)
	Low	22 (42)	31 (58)
		Chi square = 18.05 p < .001	
Working	High	24 (55)	20 (45)
	Low	4 (24)	13 (76)
		Chi square = 4.75 p < .05	

In Table 37, relationships between satisfaction with the teacher and utilization at three social status levels are presented. These data show that satisfaction with the teacher is significantly related to the utilization of intelligence for girls at every social status level. Although low satisfaction with the teacher seldom occurs for girls, when it does, it is usually accompanied by low utilization.

The relationships between perceived parental support of school and utilization of intelligence at the three social class levels are summarized in Table 38. These data show that perceived parental support and utilization are significantly associated only for the lower middle class girls.

TABLE 38

SOCIAL CLASS AND PERCEIVED PARENTAL SUPPORT IN RELATION TO UTILIZATION FOR GIRLS

Familial Social Class	Parental Support	Utilization High	Utilization Low
Upper Middle	High	54 (78)	15 (22)
	Low	7 (54)	6 (46)
		Chi square = 3.42 p = NS	
Lower Middle	High	85 (70)	37 (30)
	Low	18 (46)	21 (54)
		Chi square = 7.09 p < .01	
Working	High	22 (47)	25 (53)
	Low	6 (43)	8 (57)
		Chi square = .068 p = NS	

In considering girls as a separate population, the results indicate, so far, that satisfaction with the teacher is more highly and universally associated with utilization of intelligence than is any other variable. Further analyses of the female data provide additional support for this conclusion. In the next stage of the analysis for girls, we first control on perceived peer status, then on perceived parental support, in order to determine if satisfaction with teacher and utilization are associated when the effects of these variables are removed.

TABLE 39

PERCEIVED PEER STATUS AND SATISFACTION WITH TEACHER IN RELATION TO UTILIZATION FOR GIRLS

Perceived Peer Status	Satisfaction With Teacher	Utilization High	Utilization Low
High	High	123 (75%)	40 (25%)
	Low	18 (42%)	25 (58%)
		Chi square = 17.79 p < .001	
Low	High	35 (63%)	21 (37%)
	Low	16 (38%)	26 (62%)
		Chi square = 5.73 p < .02	

The data in Table 39 indicate that satisfaction with teacher and utilization are associated for girls whether they perceive themselves as having high or low status in the peer group. Differences in percentages and the chi square results leave little doubt that being satisfied with the teacher is important for a girl's utilization of her intelligence regardless of her relations with peers.

The analysis presented in Table 40 indicates much the same type of relationship between perceived parental support, school satisfaction with teacher, and utilization. Even though the results for girls with a perception of low parental support are not as clear cut as those for girls with low peer support, nevertheless satisfaction with teacher is associated with utilization of intelligence regardless of the level of perceived parental support. Indeed, these data further substantiate the indication that the teacher is a potent force for the pupil's level of academic motivation and achievement in the classroom.

TABLE 40

PERCEIVED PARENTAL SUPPORT AND SATISFACTION WITH TEACHER IN RELATION TO UTILIZATION OF I.Q.'S

Perceived Parental Support	Satisfaction With Teacher	Utilization			
		High		Low	
High	High	137	75	45	25
	Low	24	43	32	57
		Chi square = 20.36 p < .001			
Low	High	21	57	16	43
	Low	10	34	19	66
		Chi square = 3.24 .05 < p < .10			

The data allow for still a third analysis stage for the girls, controlling the effects of social class, perceived peer group status, and perceived parental support while observing the relationship between satisfaction with the teacher and utilization. As our previous analyses

indicated significant results for only lower middle class girls the effects of parental support, peer status and teacher satisfaction will be analyzed for this social status classification only.

In Table 41, the data indicate that for lower middle class girls satisfaction with the teacher and utilization are associated only for those with a perception of high peer status. However, an inspection of the results for the lower middle class girls with low peer status does indicate a trend supporting the importance of the teacher variable.

TABLE 41

PERCEIVED PEER STATUS AND SATISFACTION WITH TEACHER IN RELATION TO UTILIZATION FOR LOWER MIDDLE CLASS GIRLS

Familial Social Class	Peer Status	Satisfaction With Teacher	Utilization High	Utilization Low
Lower Middle Class	High	High	63 80%	16 20%
		Low	8 36%	14 64%
			Chi square = 15 51 p < 001	
	Low	High	18 62%	11 38%
		Low	14 45%	17 55%
			Chi square = 1 72 p = NS	

The results presented in Table 42 indicate a similar pattern. The data show that satisfaction with teacher and utilization are associated for lower middle class girls with a perception of high parental support but not for girls with low parental support.

TABLE 42

PERCEIVED PARENTAL SUPPORT AND SATISFACTION WITH TEACHER IN RELATION TO UTILIZATION FOR LOWER MIDDLE CLASS GIRLS

Familial Social Class	Peer Status	Satisfaction With Teacher	Utilization High	Utilization Low
Lower Middle Class	High	High	71 79%	19 21%
		Low	14 44%	18 56%
			Chi square = 13.79 p < .001	
	Low	High	10 56%	8 44%
		Low	8 38%	13 62%
			Chi square = 1.19 p = NS	

The analyses summarized in Tables 41 and 42 provide partial substantiation for the emphasis on the importance of the teacher as an emotional affiliate which has emerged in the analysis of these data in this chapter.

The results in Table 43 more clearly support this emphasis on pupil satisfaction with the teacher as an important factor in pupil utilization of intelligence. With boys and girls combined, the data indicate the association between satisfaction with teacher and utilization persists while controlling on familial social class, perceived parental support, and perceived peer status. Given this many controls and our sample size, the data did not allow for separate analyses of boys and girls. The results in Table 43 indicate clearly that satisfaction with the teacher and utilization are associated when the effects of social

class, parental support and peer status are held constant. In all conditions with the exception of lower middle class pupils with perceptions of low parental support and low peer status, high satisfaction with the teacher appears to be more powerful than all other social influence factors in affecting full utilization of intelligence.

TABLE 43

PERCEIVED PARENTAL SUPPORT, PEER STATUS, AND SATISFACTION WITH TEACHER IN RELATION TO UTILIZATION FOR LOWER MIDDLE CLASS PUPILS (Boys and Girls)

Familial Social Class	Parental Support	Peer Status	Satisfaction With Teacher	Utilization High	Utilization Low
Lower Middle Class	High	High	High	74 (64)	42 (36)
			Low	7 (24)	22 (76)
				Chi Square = 14.80 p < .001	
		Low	High	26 (59)	18 (41)
			Low	12 (32)	25 (68)
				Chi Square = 5.74 p < .02	
	Low	High	High	12 (67)	6 (33)
			Low	3 (25)	9 (75)
				Chi Square = 5.00 p < .05	
		Low	High	4 (27)	11 (73)
			Low	7 (25)	21 (75)
				Chi Square = .01 p = NS	

In summary, when considering the relationships between utilization of intelligence and the non-intellectual variables chosen for study, boys and girls show different patterns of relationships in some cases, and similar patterns in others. The two sexes differ in the influence of perceived parental attitudes and home social class background on utilization of intelligence. For girls, the variables of familial social class and perceived parental support are both significantly associated with utilization. Neither of these relationships hold for boys. On the other hand, boys and girls are similar in that both perceived status in the peer group and satisfaction with the teacher are significantly associated with utilization. The classroom process variables of peer dynamics and teacher social-emotional influence are the most significant factors studied here for utilization of intellectual abilities for both sexes.

The results of this multi-stage analysis indicate that when the influences of familial social class, perceived parental support, perceived peer status, and satisfaction with the teacher are compared for their relative impact on the utilization of intelligence, pupil satisfaction with the teacher and utilization are associated when the other three variables are controlled. For girls in particular, the importance of being satisfied with the teacher for utilization is borne out in the stage by stage analysis. As each source of variation is held constant all variables are no longer significantly associated with utilization except for satisfaction with the teacher. The teacher, as a social emotional leader, has an effect on achievement for both boys and girls according to our data, which is independent to a significant degree from the effects of parents and peers.

In contrast to the relative importance of satisfaction with the teacher, the data also indicate that familial social class is a

minor factor in influencing pupil utilization in our population. Although social class and utilization are associated, the impact of social class is diminished as the effects of other social influences are held constant. Particularly for the boys, familial social class and parental support are less important than the factors of peer group status and satisfaction with the teacher in influencing utilization. These results are in agreement with recent sociological literature indicating that social class is not a very powerful predictor of school achievement.

One possible explanation is that social categories other than occupational status are more potent influences in contemporary America. Data reported by Luszki and Schmuck (1963), for instance, indicate that while paternal occupational status and pupils' perceptions of parental support of school are not related, the levels of paternal and maternal education are associated with a child's perception of parental support of school. The research of Miller and Swanson (1958) further suggests that paternal occupational style, e.g., entrepreneurial or bureaucratic, might be more relevant to pupil attitudes and achievement than occupational status.

The data of this study also show that whereas influences on utilization which stem from the home are minimal for boys as compared to girls, the impact of peer status is strong for both sexes. Although home influences and peer group relations are related to utilization, the teacher emerges in these data as the most potent single factor in the school life of the pupil. The results indicate that pupil perceptions of the teacher far outweigh all other influences on the level of utilization of intelligence for both sexes. The importance of the teacher's social-emotional relationship skills for pupil motivation and achievement receive additional

support from several findings arising from further analyses of the same pupils. The first of these findings is as follows:

A lack of congruence between the way a pupil feels about classroom relevant behaviors and how he thinks the teacher feels is accompanied by a low level of utilization of intelligence.

This generalization, substantiated by Schmuck, Luszki, and Epperson (1963) in an investigation of a pilot sample of pupils for the present study, is based on the assumption that pupils who have attitudes about school which differ from those of the teacher are more likely to be deprived of rewards from the teacher than pupils whose attitudes are more consonant with those of the teacher. It is further assumed that with few rewards forthcoming from the teacher, a pupil feels excluded and often develops feelings of inadequacy and incompetency as a result. Since individuals tend to behave in a manner consistent with their self images, it seems probable that those pupils who see themselves as inadequate and incompetent will be significantly deterred from effective academic performances.

On the basis of assumptions like these, Schmuck, Luszki, and Epperson tested the relationships between pupil attitudinal congruence with the teacher and utilization. In order to measure congruence between the pupil's attitudes and those which he attributes to the teacher, each pupil was presented with a series of statements dealing with classroom standards. Each pupil was asked to indicate how he personally felt and how he thought the teacher felt about the standards. Discrepancy scores were obtained between the pupil's own feelings and those he attributed to the teacher, and were used as measures of congruence. The results of the analysis substantiated the hypothesis.

A second finding bearing on teacher influences which emerged from analysis of another aspect of the data collected in the present study is as follows:

Pupils with more compatible affective relations with teachers utilize their intelligence at a higher level than those with less compatible relations.

In substantiating this generalization each teacher was asked to rate every pupil on a nine-point scale to indicate how much he was attracted to the pupil. These ratings were used as an index of the teacher's liking for each pupil. At the same time, every pupil was asked to indicate how he would like his teacher to change in the area of acting friendly. The magnitude of change desired by the pupil was used as an indication of attraction for the teacher. A teacher-pupil compatibility measure was derived from combining these two attraction measures.

To derive a measure of the contribution of intelligence and academic performance to these compatibility scores, an analysis of variance was performed. The analysis summarized in Table 44 indicates that both intelligence and academic performance account for some of the variation of the teacher-pupil compatibility. Performance, however, accounts for more than twice as much variation as intelligence, indicating that compatibility and utilization of intelligence are significantly related.

Granted the importance of teacher social-emotional influence on pupil motivation and achievement, why, we might ask, do girls differ so consistently from boys in utilizing their intelligence at a higher level? The answer can be given partially by the following two findings:

Classroom related attitudes of girls are more congruent with attitudes of the teacher than are those of boys.

TABLE 44

ANALYSIS OF THE VARIATION CONTRIBUTED BY INTELLIGENCE AND PERFORMANCE ON THE PART OF PUPILS TO TEACHER-PUPIL COMPATIBILITY

Source of Variation	Sum of Squares	df	Var. est.	f	Signif. level
Intelligence	19.592	1	19.192	13.4	.001
Academic Performance	50.290	1	50.290	34.3	.001
Interaction	.41	1	.41	.3	NS
Ind.	147.731	100	1.467		
Total	217.022	103	2.107		

Findings in support of this generalization are reported by Epperson (1962) in a study of the same pupils used in the present analysis. Epperson's analysis indicates a difinite trend for girls to hold attitudes congruent with those of the teacher more often than boys ($\chi^2 = 8.15$ $p < .05$).

Girls have more compatible affective relations with teachers than boys.

A second finding shedding light on the relationship between sex of pupil and teacher social-emotional influences emerged from further analysis of the present data. The finding is that more mutual attraction, or compatibility is indicated between girls and teachers than between boys and teachers. In twenty-six classrooms for which data were available in this analysis, the mean girl-teacher compatibility was higher than the mean boy-teacher compatibility in nineteen classes. Further, a T-test between these two means for the whole sample is significant at less than

the .05 level. The data confirm the proposition that girls and teachers have more compatible relations than boys and teachers.

Since only seven of the twenty six teachers involved in this compatibility analysis are male, however, it is conceivable that an interaction exists between sex of pupil and sex of the teacher. We might ask, for instance, is it the case that female teachers are more compatible with girls, while male teachers are more compatible with boys? In order to answer this query, an analysis of the variance of the compatibility score was made, considering the sex of the pupils and the sex of the teachers as the sources of variation. Table 45 shows that both sources of variation are significant at or below the .01 level. However, interaction between the factors is not significant. Thus, in the classrooms under study, female teachers, in general have more compatible relationships with pupils than male teachers do, and girl pupils have more compatible relations with their teachers than boy pupils. In conclusion, these results show that female teacher and boy pupil or male teacher and girl pupil are next most compatible, and that male teachers and boy pupils are least compatible. This sample of male teachers is very small, however, causing us to hesitate in putting much emphasis on the results. Nevertheless, these data are clear in emphasizing how important it is for teachers to possess the social-emotional skills needed in relating positively to children of both sexes.

TABLE 45

ANALYSIS OF THE VARIATION CONTRIBUTED BY SEX OF PUPIL AND TEACHER TO PUPIL-TEACHER COMPATIBILITY

Source of Variation	Sum of Squares	df	Var. Est.	f	Signif level
Pupil's sex	60.26	1	60.26	11.39	.001
Teacher's sex	29.15	1	39.15	7.40	.01
Interaction	4.50	1	4.58	.87	NS
Ind.	3,693.45	698	5.29		
Total	3,797.44	701			

IMPLICATIONS

One implication that appears obvious in light of these findings is that, regardless of the sex of the teacher, he or she must work on modifying orientations toward and expectations about male pupils. Considering both sexes to have similar cognitive resources during the very early elementary years may be a partial determinant of boys being dissatisfied with school later in their development. For although boys and girls do not differ significantly on general intelligence scores in the upper elementary years and higher, some studies (Olson, 1949) have indicated that girls do excell boys in the speed with which they develop and use cognitive skills, especially verbal skills, during the first few years of school. Given the importance of verbal skills for achievement in school, any early frustration and consequent decrement in performance can be very detrimental to a boy's self-esteem. Indeed, Bledsoe and Garrison (1962) in a comprehensive study of 605 fourth and sixth grader

pupils show that girls have significantly higher self-concept ratings than boys at both grade levels. Teachers who expect the same level of academic performance for both sexes during these early years years may actually be generating in male pupils feelings of inadequacy, incompetency, and negative attitudes toward teachers in general with the result that these boys are not able to utilize their intellectual abilities to the fullest extent during the rest of their formal education.

Finally, the results of this study point to the significant impact of the immediate classroom milieu for a pupil's utilization of intelligence. Social-emotional aspects of both peer group relations and teacher relationships appear to take precedence over the extra-school influences of the family in shaping a pupil's motivation to learn and his consequent academic performance.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Background

The school provides one of the major socialization cultures for the child. Its impact is exerted on him through his continuous participation in the interaction and activities of the classroom and playground. Parents play a significant role in shaping the child's predisposition to the pupil role. Peers and Teachers represent the most important direct influence figures in pupils' classroom life. The effects of these three sources of influence on pupils' mental health and learning are one of two general topics studied in detail here. The second involves an analysis of teacher-pupil compatibility patterns and how these are related to the personal characteristics of teachers and pupils on the one hand and the classroom learning environment on the other. Collaboration between pupil and teacher and supportive peer relations are crucial for the efficient transmission of the academic culture and for the development and growth of creative cultural contributions.

Objectives

1. To study some of the determinants and effects of a pupil's perception of his parents' attitudes toward school.

2. To study some relationships of peer liking patterns in the classroom to pupil attitudes and performance.

3. To study some relationships of teacher attitudes to pupil attitudes and performance.

4 To study the relative impact of parent, peer, and teacher factors on pupil performance

5 To study the determinants and effects of teacher-pupil compatibility patterns

Procedure

The data reported in this study were derived from some public school classrooms in rural, industrial, suburban, and university communities. The data from each classroom were obtained from three sources: (a) questionnaires and group interviews with pupils, (b) questionnaires and interviews with teachers, and (c) a brief period of classroom observation.

The sample was selected from a group of teachers in southeastern Michigan who volunteered to participate in the project. The selection of teachers from the volunteers was determined by the objective of sampling a diverse representation of types of communities and grade levels. As a result, a subject pool comprising 727 children was drawn from twenty-seven public school classrooms. Some of the fathers' occupations for the pupils in the sample differ significantly from classroom to classroom. For instance, in one classroom ninety per cent of the fathers are professional, while in another, ninety-seven per cent are classified as unskilled. The racial composition ranges from predominantly Negro in one class to all white in others. The diversity of the sample suggests that the results are applicable to most midwest communities outside of large urban areas.

All of the questionnaires were administered by members of the research team in the Spring of 1960 and again in 1961. The only exceptions to this general procedure were a short family background information form and a sentence completion test which were administered by the regular

classroom teacher. Each teacher was instructed carefully in the standard administration procedure.

Nearly all of the pupils had the experience of filling out a shorter but similar questionnaire in the Fall of 1960. Children who did not have adequate reading skills to follow the questionnaire (which was read to all pupils by the examiner) were eliminated from the sample. Approximately two per cent of the original sample did not complete their questionnaires and therefore are not included in this sample. Hence, this study does not include children with severe academic disabilities.

Results and Conclusions

Parental Influences

1. Parents who are perceived by their children as supportive of school life have more formal education than those who are indifferent or nonsupportive.

2. Children of mothers who work full time see their mother as less supportive of school than do other children.

3. Younger pupils view their parents as supporting their school life more than older pupils.

4. Pupils who perceive their parents as holding supportive attitudes toward their school life utilize their abilities more fully than pupils who perceive less parental support.

5. Indices for parental support of school, self-esteem, and attitudes toward school show that pupils who view their parents as supporting school have higher self-esteem and more positive attitudes toward school than pupils who view less parental support of school.

Peer Influences

1. Classroom peer groups distinguished by more liking diffuseness exhibit more positive group affect than groups with more centrality.

2. Pupils are more accurate when estimating their actual liking status in the peer group, the more liking choices are centrally structured in the group.

3. Pupils with low actual liking status are lower utilizers of their abilities than pupils with higher actual liking status.

4. Pupils who perceive themselves as holding low liking status are lower utilizers of their abilities than pupils with higher perceived status. This result emphasizes the importance of introducing perceived status into studies relating sociometric status to performance.

5. Perceived liking status in the peer group is related positively and significantly to both attitude toward self and attitude toward school, while actual liking status shows no such relation to these variables.

6. Associations exist between actual liking status and one's utilization of abilities, only for pupils with high potency of involvement in the peer group.

7. Associations exist between actual liking status and attitudes toward self only for pupils with high potency of involvement in the peer group.

8. The attitude toward self of pupils with high potency of involvement in the peer group is more positive as peer group structure increases in diffuseness.

Teacher Influences

1. The more a teacher likes a particular pupil, the less isolated he is from the teacher.

2. Isolation from the teacher is greater when a pupil perceives himself as being disliked by his teacher than when he thinks he is liked by the teacher.

3 A high level of isolation from the teacher is accompanied by a high level of dissatisfaction with the teacher

4 A pupil's dissatisfaction with his teacher is accompanied by dissatisfaction for himself (low self-esteem)

5 Pupils who are isolated from the teacher have more negative attitudes toward school than those who are not isolated from the teacher

6. Pupils who have positive attitudes toward class are higher utilizers of their intelligence than those who are less attracted to the class.

Parent, Peer, and Teacher Influences Compared

1. Girls utilize their intellectual abilities more highly than boys.

2. Social class and utilization of intelligence are related positively for girls but not for boys

3 Perceived liking status in the peer group is positively associated with utilization of intelligence for both boys and girls.

4. Pupil satisfaction with the teacher and utilization of intelligence are positively related for both sexes.

5 Perceived parental support of school and utilization of intelligence are related positively for girls but not for boys

6 Perceived peer status and utilization are associated only in the case of girls designated as lower middle class.

7. Satisfaction with the teacher is significantly related to the utilization of intelligence for girls at every social status level.

8. Perceived parental support and utilization are significantly associated only for the lower middle class girls

9. Satisfaction with teacher and utilization are associated for girls whether they perceive themselves as having high or low status in the peer group.

10. Satisfaction with teacher is associated with utilization of intelligence for girls regardless of the level of perceived parental support

11 For both sexes combined, satisfaction with the teacher and utilization are associated when the effects of social class, parental support, and peer status are held constant.

12. A lack of congruence between the way a pupil feels about classroom relevant behaviors and how he thinks the teacher feels is accompanied by a low level of utilization of intelligence

13. Pupils with more compatible affective relations with teachers utilize their intelligence at a higher level than those with less compatible relations

14. Classroom related attitudes of girls are more congruent with attitudes of the teacher than are those of boys

15. Girls are more compatible with teachers than boys

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There are thirteen references listed in the final report

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APPENDIX

Sociometric Questions

In every classroom there are some pupils who seem to do certain things or act in certain ways more often than other pupils. We would like to know which pupils you think do certain things more often than others. Please answer each question as thoughtfully as you can, using your class list with the names and numbers.

Which 4 persons in this class do you <u>like the most</u>? Please write their numbers in the 4 blanks below. Jot down a few words on the blank telling why you like that person. Write only one number on each line. Do not include your own number.

	Pupil's Number	<u>Why do you like each one?</u>
Like most	_____	_____
Like next most	_____	_____
Like third from most	_____	_____
Like fourth from most	_____	_____

Which 4 persons do you <u>like the least</u>? Write the numbers in the blanks and jot down a few words about why you don't like that person so much. Write only one number on each line. Do not include your own number.

	Pupil's Number	<u>Why don't you like him or her so much?</u>
Like the least	_____	_____
Like next least	_____	_____
Like third from least	_____	_____
Like fourth from least	_____	_____

Where would you place yourself in judging how much the others in class like you?

_____ In highest part (quarter) of the class

_____ In second highest part (quarter)

_____ In third part (quarter)

_____ In lowest part (quarter)

Who are the four pupils in this class who you think most often get other pupils in this class to do what they want them to do? Write the numbers of the 4 persons in the correct blanks below, and fill in the line with a few words saying why he or she is able to get others to do things. Write only one number on each line. Do not include your own number

	Pupil's Number	Why is each able to get others to do things?
Most often	_____	_____
Next most often	_____	_____
Third most often	_____	_____
Fourth most often	_____	_____

Who are the four pupils in this class who you think least often get others to do what they want them to do? Write the numbers in the correct blanks below and fill in a few words about why you think they are not able to get others to do things. Write only one number on each line. Do not include your own number

	Pupil's Number	Why is each not able to get others to do things?
Least often	_____	_____
Next to least often	_____	_____
Third from least often	_____	_____
Fourth from least often	_____	_____

Compared with the others in this class, how often can you get others to do what you want them to do? Place yourself in one of the four parts of the class by checking one of the blanks below.

_____ I'm in the highest part (quarter) of the class

_____ I'm in the second highest part (quarter)

_____ I'm in the third part (quarter)

_____ I'm in the lowest part (quarter)

Who are the four persons in this class who you think are best at doing the kinds of work you do in this class? Write in the blank what he or she is particularly good at. Do not include your own number.

	Pupil's Number	What is each good at?
Best	_____	_____
Next best	_____	_____
Third best	_____	_____
Fourth best	_____	_____

Who are the four pupils in this class who you think are poorest at doing the kinds of work you do in this class? Write in the blank what he or she is not able to do very well. Do not include your own number.

	Pupil's Number	What is he or she not able to do very well?
Poorest	_____	_____
Next to poorest	_____	_____
Third from poorest	_____	_____
Fourth from poorest	_____	_____

Compared with the others in this class, how good are you at doing the kinds of work this class does? Place yourself in one of the four parts of the class by checking one of the blanks below

_____ In the highest part (quarter) of the class

_____ In the second highest part (quarter)

_____ In the third part (quarter)

_____ In the lowest part (quarter)

Potency of Involvement Question

Are there other young people about your age not in this group whom you like better than anyone in this group?

Yes _____ No _____ (Please check right answer)

If you answered "Yes", how many of these other young people would you say there are that you like better than anybody in this class?

_____ (write in the number you would guess)

MY CLASSMATES

Everyone has some things about him you like and some things about him you don't like so much. Some people seem to have more things about them you like and other people have more things about them you don't like.

Look at the circles below. Suppose that each circle stands for a different kind of person. Each person has different amounts of things you like and don't like. Circle 1 has all pluses (+) in it. This stands for a person who has only things about him you like. Circle 9 has all minuses (-) in it. This stands for a person who has only things about him you don't like. The other circles have different amounts of pluses and minuses. These circles stand for people, some of whom have more things you like than don't like, and some of whom have more things you don't like than things you like.

For each person in this class, pick the circle which shows the combination of things you like and don't like. Then put a check (✓) for each person under the circle you chose. Check just one circle for each person. Do this for yourself too.

Names	1	2	3	4	5	6	7	8	9

YOUR PUPILS

Every pupil has characteristics which you like and other characteristics which you don't like so much. Some pupils seem to have more things about them that you, as a teacher, like; while other pupils have more things about them that you don't like.

Look at the circles below. Suppose that each circle stands for a different kind of pupil. Each pupil has different amounts of things you like and don't like. Circle 1 has all pluses (+) in it. This stands for a pupil who has only things about him you like. Circle 9 has all minuses (-) in it. This stands for a pupil who has only things about him you don't like. The other circles have different amounts of pluses and minuses. These circles stand for pupils, some of whom have more things you like than things you don't like, and some of whom have more things you don't like than things you like.

For each pupil in your class, pick the circle which shows the combination of things you like and don't like then put a check (✓) for each pupil under the circle you chose. Check just one circle for each pupil.

Names	1	2	3	4	5	6	7	8	9

SENTENCE COMPLETIONS

Name _____ Date _____
(Last) (First)

Teacher _____ Grade _____

On the lines below you will find a number of sentences which are started but are not finished. Complete each sentence to tell how you really feel. Let's try an example. Suppose the sentence reads,

A. Today I want to _____

_____

To complete this sentence you might write "play ball," "get a good grade," "finish my homework early so I can go to a show," or many, many other things, depending on what you really want. Here's another harder one:

B. Compared with most years, this one _____

_____

To finish this sentence you might write "didn't have as much snow," "was about the same as most years," "was more interesting for me," or many other things to tell how you feel this year was alike or different from most years.

Now start with the first sentence below, telling how you really feel. Do every one. Be sure to make a whole sentence. There are no right or wrong answers. Each person will have different sentences. Hand in your paper as soon as you have finished.

1. Compared with most families, mine _____

_____

2. I am best when _____

_____

3. My schoolwork _____

_____

4. Some day I _____

_____

5. Studying is _____

_____

6. Sometimes I think I am _____

_____

7. I learn best when _____

_____

8. If someone makes fun of me, I _____

_____

9. Mothers should learn that _____

_____

10. When I look at other boys and girls and then look at myself I feel

_____

11. A nice thing about my family _____

_____

12. Homework is _____

_____

13. When I grow up I want to be _____

_____

14. I get in trouble when _____

_____

15. I wish my father _____

_____

16. Learning out of books is _____

_____

17. If I could be someone else I _____

_____

18. If only teachers _____

_____

19. When I am by myself _____

_____

20. When I talk about school, my mother _____

_____

21. To keep from getting into a fight, you must _____

_____

22 I am happiest when _____

_____

23. Fathers should learn that _____

_____

24. To get along well in a group, you have to _____

_____

25. I can't learn when _____

_____

26. I wish my mother _____

_____

27. Making friends is hard if _____

_____

28. What I like to do most is _____

_____

29. If I should fail in school _____

_____

30. When I look in the mirror, I _____

_____

31. My family treats me like _____

_____

32. In class, working by myself is _____

_____

33. When I am older _____

_____

34. A mother is nice when _____

_____

35. When I talk about school my father _____

_____

36. When I'm not around my friends _____

_____

37. I get mad when _____

_____

38. Most of all I want to _____

_____

39. A father is nice when _____

_____

40. In class working with others is _____

_____

41. At home I _____

_____

42. I often wish _____

_____

43. My teacher thinks I am _____

_____

44. If I were a parent I _____

_____

45. When I get mad _____

_____

46. This school _____

_____